PROGRAM DELIVERY IN A PERIOD OF DECLINING ENROLMENT (1975–1984)

A Study of Replicable Coping Strategies Used in Small Secondary Schools, Particularly in Northwestern Ontario

Principal Investigators
RODERICK W. McLEOD
J. DAVID BATES
L. LARRY KORTEWEG

This research project was funded under contract by the Ministry of Education, Ontario.
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Chris Ward, Minister
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Abstract

Program delivery strategies used by small secondary schools in Northern Ontario between 1975 and 1984, a period of secondary enrolment decline, have been examined and documented in this study. Data on program delivery in 22 small secondary schools (fewer than 100 students per grade) were gathered through the responses of 22 principals, 310 teachers, and 870 Grade 12 students to a survey questionnaire on selected aspects of program delivery. This was followed by a series of on-site, structured interviews with purposively selected principals (6), teachers (24), and students (48) who had participated in the survey. These data were supplemented by an analysis of program offerings reported in the September reports for a subsample of the schools. Other information on small secondary school delivery was gathered through a review of the literature and visits with members of the Departments of Education in Manitoba, Saskatchewan, and Alberta. Interviews were conducted with three regional education administrators, two board directors, and two program council co-ordinators.

The definition of small secondary school in terms of size varied from province to province. Small secondary schools in Manitoba and Saskatchewan generally were smaller than the Ontario schools that participated in this study. An analysis of program delivery showed that the most common coping strategies used resources from within the school system. These included multilevel/-grade/-subject classes, alternate year scheduling, and teachers teaching outside their specialty. Principals, teachers, and students varied in their perceptions of these alternatives.

Two common strategies using resources outside school systems were correspondence education and co-operative education. While the former had increased in use, it received different ratings on effectiveness by principals, teachers, and students. It is an alternative that could be more effectively implemented. At the time of the survey and interviews, co-operative education was being planned or implemented on a trial basis.

Concerns about the appropriateness of this alternative in small, resource-based communities have been noted in the report. The perceptions of the respondents on program councils indicated these ventures were successful and provided valuable "surrogate department meetings" for those involved. This strategy was supported both by a third party outside the school systems and by between system co-operation. However, there were very few examples of coping strategies based on co-operation between two or more school systems and this appeared to be a set of coping strategies that could be cultivated.

The study concluded that program delivery change has been incremental in nature. Changes have been more in degree than in kind. The more notable changes usually involved third party intervention and support. The changes in program delivery strategy generally were acceptable to the principals, teachers, and students. There was very little use of technologically enhanced program delivery. Such strategies appeared to require outside system support to be successful.

Small secondary schools are and will continue to be a prominent part of Ontario's educational system. The report concludes with recommendations for strengthening program delivery in small secondary schools.

Acknowledgements

A number of individuals have made significant contributions to the completion of this study. We wish at the outset of our report to recognize their support and to extend our sincere appreciation for their assistance. In particular we thank the 22 principals, 310 teachers, and 870 Grade 12 students who responded to the survey questionnaires. The further assistance of 6 principals, 23 teachers, and 45 students who were interviewed at their schools contributed to the depth and breadth of the study. We were welcomed into each of the six schools and provided with arrangements to accommodate our work. This co-operation greatly facilitated that phase of the study.

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Roderick W. McLeod
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Chapter 1

Description of the Study

1.1. Introduction

According to the Ontario Ministry of Education publication Education Statistics Ontario, 1985 (Ontario, 1987:4), the Ontario public secondary school enrolment reached 613 830 students in September 1977. Since then the provincial secondary school system has experienced a general decline in student numbers. In the most recently released statistics for September 1985, the number of secondary school students enrolled across the province was 535 964. This was a decline of 77 866 (13%) in the number of students in Grades 9-13 between 1977 and 1985. Regarding this public secondary school enrolment decline, the Ministry of Education stated in its annual summary, that, in part, it was accelerated in 1985 by the extension of public funding to Grade 11 in the Roman Catholic separate schools.

During the same period in Northern Ontario, that area of the province north of the French River and comprising the Ministry of Education's three northern regional offices of Northwestern, Midnorthern, and Northeastern Ontario, secondary school enrolments dropped 14 018 (20%) from 71 766 to 57 748. With this demographic shift in school population came the realities of the management of decline as small schools became smaller. At the same time, a growing body of literature related to contracting school systems has emerged. Connelly and Enns observed that this literature has been focused on issues other than programs. They and others (Corman, 1979; Zerchykov and Weaver, 1983) had identified the area of curriculum and program decision making as a noticeable gap in our understanding of enrolment decline. This study was designed to address the decisions made in small secondary schools in Northern Ontario regarding program delivery during a period of declining enrolments.

The education process is complex and dynamic. At the provincial level, the Ministry of Education sets regulations, develops curriculum guidelines, and prepares curriculum support documents. In classes across the province, educators provide students with course instruction. Between these two aspects of the process the planning and development of program delivery occurs. This is generally a school level responsibility under the direction of the principal with the assistance of the teaching staff, to be implemented within the requirements for the Ontario Secondary School Diploma set out by the Ministry of Education in Ontario Schools, Intermediate and Senior Divisions [OSIS], (Ontario, 1984) and sensitive to the abilities, interests, and needs of the students served.

This study has documented and attempted to describe how small secondary schools in Northern Ontario have coped with program delivery as their student numbers declined. Perceptions of principals, which had been major data sources used in studies reported in the literature, have been augmented and enriched by those of teachers and Grade 12 students in an attempt to provide a more comprehensive perspective. The emphasis throughout the study has been on replicable strategies as opposed to those that were related specifically to exceptional local factors and thus less likely to be generalized for use by others. We provide a systematic view of small secondary school program delivery as it has been implemented in a sparsely populated Canadian region and intend the description to be useful to those who will be planning program delivery in similar settings under comparable conditions.

It should be noted at the outset that, although in general enrolments declined across Northern Ontario between September 1975 and September 1985, some of the participating schools in this study experienced modest increased enrolments, generally as an effect of improved local economic conditions. As well, while the focus of the study focused on coping with declining enrolments, it has become increasingly obvious that these schools were coping with a number of other changing conditions at the same time. These included special education legislation, funding constraints, and collective agreements. While these factors were not stressed in the study, individually and collectively such conditions are indicative of the complexity of educational decision making and appear to have affected program delivery decisions as much as did enrolment decline.

1.2. Scope of the Study

In March 1984 the Ministry of Education contracted with Lakehead University to examine and report on program delivery in small secondary schools during a period of declining enrolment (1975-84), with a particular emphasis on Northwestern Ontario. The terms of reference stated that the study was:

A) to examine program delivery in small secondary schools in Northern Ontario over the past decade to determine the impact of enrolment decline;

B) to determine the coping strategies used in small secondary schools, boards, and regional offices to maintain quality programs; and

C) to review and prepare a summary of literature on secondary school program delivery, to visit other selected provincial centres, and to synthesize the findings.

Focusing Questions. In an attempt to focus the study, a number of specific questions were constructed:

1. What program delivery strategies have been commonly used in small secondary schools?
2. How effective were these strategies?
3. What notable changes have there been in program delivery over the past decade?
4. What factors other than declining enrolment have affected program delivery?
5. How do the opinions of administrators, teachers, and students on program delivery in small secondary schools compare?

1.3. Methodology

The terms of reference for the contract required the inclusion of both survey and interview data. The study combined traditional questionnaire survey methodology with an interview procedure based on the Service Delivery Assessment model used in the U. S. Department of Health, Education, and Welfare and described by Hendricks (1981). The latter method utilized purposive sampling to obtain relevant, quick, and efficient answers to questions of program evaluation and policy making. It included four components:

1. A preassessment of local realities and important issues.
2. One-to-one personal discussions with a variety of local respondents.
3. Retrieval of local data.
4. Debriefing of the assessors.

Qualitative and naturalistic interview principles, such as described by Patton (1980) and Wolf (1979), guided the development, implementation, and interpretation of the interview phase of the study.

1.3.1. Design of the Study

This study was conducted in four distinct phases:

1. A survey of the literature;
2. Visits to education officials in Manitoba, Saskatchewan, and Alberta with interests and responsibilities in small school programs and distance education;
3. A questionnaire survey of the principal, teachers, and Grade 12 students of twenty-two small, remote secondary schools in Northern Ontario; and
4. Interviews with a purposively selected sample of principals, teachers, and students from six of the schools surveyed and with board and regional education officials with related interests and responsibilities.

1.3.1.1. The General Plan

The four components of the Hendricks (1981) SDA model were applied to this study in the following manner:

A. Preassessment of local realities and important issues. We used our knowledge of the Northern Ontario schools built up over more than twenty years, discussions with regional Ministry of Education officials, interviews with education officials responsible for small secondary schools in other provinces, and visits to two small regional secondary schools to assess small school realities and issues and to select the schools that would be invited to participate. Then survey questionnaires for principals, teachers, and students were developed and distributed to gain additional information for planning the interview phase.

B. One-to-one discussions with a variety of local respondents. Six school principals, 24 teachers, 48 students, two directors of education, and five regional administrators involved in school programs were selected for interviews.

C. Retrieval of local data. In addition to doing the scheduled interviews during visits to the selected schools, data on timetabling, descriptions of programs, curriculum reports, and program evaluation documents were collected.

D. Debriefing of assessors. Following each set of interviews the investigators, who conducted all the interviews, met to compare notes, evaluate the progress of the interviews, and share evolving perceptions of the issues being addressed in small secondary school program delivery.

1.3.1.2. The Study Population

The Ontario Ministry of Education's list of schools receiving the 1984 Small Schools Weighting Factor (SSWF) was used as the basis for identifying schools to be included in the study. By ministry definition, the schools were those that had fewer than an average of 120 pupils per grade (as of September 30, 1983) and that were more than 32 km from all other secondary schools under the jurisdiction of the board that had the same majority language of instruction. The seventeen English or French/English schools in the three Northern Ontario Ministry of Education regions receiving the small schools weighting factor (SSWF) and five other schools were selected. Cobalt-Haileybury, Cochrane, Englehart, Northern, and Northern Lights, which were small enough to be classed as a small school and were not near a large population centre, but which because of proximity to another school or some other reason did not qualify for the SSWF, were also included. Table 1.1 below lists the schools selected.

The largest school had 537 students in Grades 9 to 13 in 1984/85, while the others ranged from 60 to 520. The average school population in 1984/85 was 305. One school had fewer than 100 students, four had 100-199 students, seven had 200-299, four had 300-399, four had 400-499, and two had 500-550.

Table 1.1

Schools Selected for the Study

Northeastern Region

1. Cobalt-Haileybury
2. Cochrane *
3. Englehart
4. McElligott (Mattawa) *
5. Northern (Sturgeon Falls)
6. Northern Lights (Moosonee)
7. Smooth Rock Falls

Midnorthern Region

8. Chapleau *
9. W.C. Eakett (Blind River)
10. French River (Noelville) *
11. Hornepayne
12. Michipicoten (Wawa)

Northwestern Region

13. Atikokan
14. Geraldton
15. Ignace
16. Lake Superior (Terrace Bay-Schreiber)
17. Manitouwadge *
18. Marathon
19. Nipigon-Red Rock
20. Queen Elizabeth (Sioux Lookout)
21. Rainy River
22. Red Lake

* French/English

1.3.2. Data Gathering

The study included three major stages of data gathering: (1) interviews with provincial education officials in Manitoba, Saskatchewan, and Alberta, (2) a survey by questionnaire of the principal, teachers,and Grade 12 students of twenty-two small secondary schools in Northern Ontario, and (3) on-site interviews with principals, teachers, and Grade 12 students in 6 purposively selected schools based on information generated from the survey.

1.3.2.1. The Questionnaire Survey

In the fall of 1984, survey questions were developed by the investigators, field tested, and distributed to the principals, teachers, and Grade 12 students in the 22 participating schools.

1.3.2.1.1. Survey Participants

Since the study population was not large, all 22 principals and all 480 teachers were included in the questionnaire survey. We selected Grade 12 students as our student participants since we considered Grade 12 students would represent the richest combination of secondary school experience and diverse vocational and academic expectations. All 1052 of the students from the 22 schools in Grade 12 were included in the survey.

1.3.2.1.2. Development of Questionnaires

The questionnaires were designed to provide information about participants from the twenty-two schools in the study and the opinions of the principal, staff, and students in each school on the delivery of school programs during the period of general enrolment decline from 1975 to 1984.

Questionnaires developed by Meaney (1976) in his study of small high schools in Newfoundland and Labrador provided a framework for the development of our questionnaires. In addition to selected information about the school and respondents, the questionnaire asked about strategies used to cope with declining enrolments and program support. Three parallel forms of the questionnaires were prepared for principals, teachers, and students.

Draft questionnaires were reviewed with regional and provincial officers of the Ministry of Education and were pilot tested in two schools. As a result of comments from ministry officials and the field testing, revised forms were produced. Copies may be obtained from the investigators.

1.3.2.1.3. Distribution and Return of Questionnaires

The questionnaires for the principals, teachers, and Grade 12 students of the twenty-two schools in Northern Ontario previously identified in Table 1.1 were mailed in bulk to each principal. Principals were requested by covering letter to distribute, collect, and return the completed questionnaires to the investigators.

Responses were received from all schools. The responses to the survey were sufficient for providing valid data. All twenty-two principals (100%), 312 of the 480 teachers (65%), and 870 of the 1052 students (83%) responded. The distribution and return of teachers' questionnaires were as follows:

Region	Questionnaires sent	Questionnaires returned	% returned
Northeastern	128	90	70
Midnorthern	123	70	57
Northwestern	229	150	66
Total	480	310	65

Proportionately by region, the questionnaires sent and returned were similar:

Region	Sent	Returned
Northeastern	26.6%	29.0%
Midnorthern	25.7	22.6
Northwestern	47.7	48.4
Total	100.0	100.0

This indicated no skewing of results related to disproportionate percentages of returns from any of the three regions. Of the 310 teacher questionnaires returned, 279 (90%) provided analysable data. Thirty-one returns (10%) were excluded from the analysis for the following reasons: two were spoiled, nine teachers said the survey didn't apply in their area, fifteen teachers had only one or two years experience and didn't think they were qualified to answer, and five teachers thought they hadn't been affected by declining enrolment and shouldn't respond. Student responses were checked and found to be distributed proportionately across the three regions also.

1.3.2.2. On-Site Visits

On-site visits were the final major information gathering phase of the study. Two-day visits in May 1986 to six of the twenty-two schools provided on-site information and interviews.

As the survey data were analysed, it became evident that there were aspects of program delivery that required further clarification, and others that needed probing to generate data that the questionnaires had not provided. These needs helped to identify the areas of emphasis for the interviews and in developing the guiding questions and probes.

Interview guides. To facilitate the gathering of comparable data, interview guides were developed for use with the three groups of participants (principals, teachers, students). Each guide was composed of eight structured questions with probes which focused on such issues as student self-study (school-based independent study/correspondence courses); multigrade, multisubject, multilevel classes; alternative scheduling patterns; co-operative education; and the concept of a core or irreducible curriculum. Students were questioned as well about computer assisted instruction since they had identified this as a significant delivery strategy on their questionnaires, but teachers and principals had not. For the principals and teachers the topics of program councils and generalist versus specialist teachers were included. A question on the utilization of Educap grants was part of the principal interview guide. In addition to these structured questions, one or two open-ended questions, which invited participants to share other observations relevant to program delivery, were included. These guides were used by the three investigator/interviewers for each interview session.

While the content of the interviews was shaped by the literature review and the nature of the data produced by responses to the questionnaires, their structure was based on guidelines from Patton (1980) and Wolf (1979) for interviewing in naturalistic settings. On-site discussions sought a comprehensive perspective and were conducted flexibly in order to provide additional relevant information.

1.3.2.2.1. Selection of Schools and Participants

Schools

As described by Hendricks (1981), sites for visits were not selected at random but were selected by criteria derived from the purpose of the evaluation. In consultation with the supervisory official from the ministry for this study, we selected six schools for on-site interview visits.

Four of these were selected from the northwestern region since this was a major focus of the study and one was selected from each of the midnorthern and northeastern regions. To select these schools the investigators examined the results of the survey phase data from the principals, teachers, and students, and purposively identified those schools where the greatest number of alternative delivery strategies had been identified. In addition, we considered the size of the school student population and school location in the final selection of the six school sites. The six schools chosen ranged from remote schools that were the only secondary school in a system to those that were one of several secondary schools in a system and relatively close to another secondary school. Enrolments in September 1984 in the six schools ranged from 265 to 520.

The schools selected for the on-site interviews are listed in Table 1.2.

Table 1.2
Schools Selected for On-Site Interviews

Region	School
Northwestern	1. Atikokan 2. Nipigon-Red Rock 3. Red Lake 4. Lake Superior
Midnorthern	5. Michipicoten
Northeastern	6. Englehart

Participants

The principal, four teachers, and eight Grade 12 students at each of the six schools were identified for interview sessions. The teachers and students were selected from those who had responded to the earlier survey. Each had indicated experience with at least three different coping strategies, and represented academic, business, and technical programs. Gender was another variable considered to ensure representation of both female and male perspectives on program delivery.

In each school the principal was very co-operative in providing time and space for interviews. All six principals, four male and two female, participated.

Of the twenty-four teachers identified, twenty-three participated. In one case a substitution was made for a teacher who had been called away from the school on the interview days. Sixteen taught in the academic program, four in business, and four in technological studies. Seventeen teachers were male and seven were female.

Of the forty-eight students identified prior to the on-site visits, forty participated in the sessions. Substitutions were made for five students who couldn't be interviewed for a variety of reasons, making a total of forty-five students interviewed. Of these forty-five, eighteen were male and twenty-seven were female. The students who did not participate or for whom substitutions were made were primarily male students in general level programs. Twenty-six of the students were registered in advanced level programs and nineteen were in general level programs. Twenty-eight were registered in academic studies, nine in business studies, and eight in technical studies.

1.3.2.2.2. Interview Procedure

Each or the three investigators was assigned two of the six schools for the interview sessions. They contacted the principals by telephone to inform them that their schools had been selected as interview sites, and to seek their permission to visit and conduct the interviews. As well as setting dates and times for these visits, the investigators arranged with the principals to have appropriate facilities for the interviews and reviewed the names of the teachers and students who had been identified for participation. In two instances a principal indicated that a teacher or student was not available because of extended illness, leaves, or departure from the school. For these cases alternative individuals were identified by the investigators and confirmed with the principals. From this information a schedule for visits to the schools was developed. A confirmation letter establishing dates, times, participants, and requested facilities for holding and taping interviews was sent to each principal. In addition, the major topics of the interview were identified.

Principals co-operated with the investigators, provided space such as guidance counselling offices, health-nurse offices, seminar rooms, or classrooms, and arranged timetables for the participating teachers and students for the interviews. Where the school timetabling did not provide opportunities for extended interview times, follow-up sessions were arranged. The principals and teachers were interviewed individually and the students were interviewed in groups of four. Each session was planned to be about ninety minutes long.

Participants were welcomed to each session and the purpose of the interview was explained. Permission was requested to record the interview and participants were informed that complete anonymity would be maintained throughout the analyses of the data and reporting of the findings.

At the beginning of the interview each participant was provided with a copy of the interview guide. As each topic was presented and the interviewer posed the questions, the participants were able to refer to these copies. Each interview session was tape recorded. Interviewer's notes and the tape recordings provided a record for later analysis.

During the interviews and throughout the two-day visit, field notes were also made by the investigators. Where relevant, school documents that dealt with program delivery were identified and copies solicited.

1.3.2.3. Other Information

In addition to the interview data from the six selected schools, we obtained information from additional sources to help provide a regional perspective to the findings. These included interviews with two directors of education, three Ministry of Education officials, the co-ordinators of the two Program Council curriculum development consortia, and two additional principals whose schools had not been selected for the on-site visits but who represented special program alternatives such as a K-13 school, and representatives of the Independent Learning Centre.

Basic statistical information for the years 1976, 1978, 1980, 1982, and 1984, such as student enrolment, subjects offered, and staff numbers was obtained from the September Reports submitted annually to the Ministry of Education by schools.

1.4. Limitations and Generalizability of the Findings

According to Davis and Ryan (1980), sixteen per cent (87 of 542) of Ontario secondary schools had fewer than 599 students and were defined as small. In our sample student enrolments ranged from 60 to 537. Since a very limited number of secondary schools in Ontario have fewer than 100 students and since there was only one such school in this study, no attempt was made in this study to examine whether such schools differed significantly in their coping strategies. We recognize that the findings and recommendations from this study may not apply directly to very small high school settings.

This study was limited to small and relatively remote secondary schools. Most of the schools in this study were more than 50 km from the nearest secondary school in the same district with the same language of instruction. They were located in communities of fewer than 4500 people. Small secondary schools closer to other secondary schools in a school district may have access to resources and program delivery options not available to relatively isolated schools; few of these were studied.

Our comparison of results from northwestern Ontario with those from the other two Northern Ontario regions shows a high degree of consistency in the survey and interview data from all three regions. The findings seem to be generalizable across the northern part of the province. Although there was some indication that secondary schools in the prairie provinces, which tend to be smaller than small secondary in Ontario, had different emphases in their use of strategies, in general the results of this study seemed consistent in many ways with practices used in those provinces.

1.5. Organization of the Report

Chapter 1 of this report has provided an overview of the purpose of the present study and the design and methodology used in gathering data for the study. Chapter 2 is a review of relevant literature, which was focused on programming in small secondary schools. A section on Canadian based literature is included. As part of the study, visits were made to the provinces of Manitoba, Saskatchewan, and Alberta. These have been documented in Chapter 3 with a synthesis of the findings. Chapters 4 and 5 report the findings of this study. In Chapter 4 discussion is focused on the data generated by survey questionnaires. Chapter 5 describes selected coping strategies as clarified by the on-site interviews with purposively sampled principals, teachers, and Grade 12 students. Implications of this study are examined in Chapter 6 and recommendations for consideration by teachers, principals, boards and their supervisory officers, and the Ministry of Education are presented.

The reader who wishes to focus on the schools in this study may want to read Chapters 4 and 5 next. However, the review of the literature in Chapter 2 and the reports on small schools in the prairie provinces in Chapter 3 help set the context for the recommendations presented in Chapter 6.

Chapter 2
Review of the Literature

2.1. Introduction

One of the terms of reference for this study was the review of relevant literature and visits to other provincial centres to produce a synthesis of the knowledge currently available regarding program delivery in small secondary schools. This chapter provides a summary of the literature reviewed and Chapter 3 focuses on the inter-provincial visits. The major period covered in the literature review is the late seventies to the present. The review was conducted through computer assisted literature searches and by manual searches of indexes not included in those searches. Descriptors used in these searches included correspondence study, distance education, educational television, independent study, program administration, program effectiveness, program evaluation, program implementation, resource allocation, rural education, and telecourses. A total of 50 545 document summaries were generated. However, when this data base was examined in terms of declining enrolment and secondary education the number of entries was greatly reduced to 55. The majority of these dealt with education in the United States while a few focused on Canadian settings.

A bibliography on issues and responses to declining enrolments prepared by Corman (1979) listed only 15 out of 229 entries under the section titled "Program Contraction, Extension, and Reorganization". This led her to observe that "in spite of the quantity, and even repetitiveness, of the literature already published . . ., there remain significant gaps, particularly in the sphere of program or curriculum design for a contracting system" (1979:iv). Dembowski et al. (1979) reported there was little empirical data on curricular changes in secondary schools under conditions of declining enrolments. In the same year Connelly and Enns stated, "The literature on declining school enrolments is primarily a literature of demography, finance, facilities, and staff" (1979:277). Much of the literature from the seventies tended to be hypothetical or predictive in nature as it was written on the front edge of decline. An example of such literature can be found in the working papers and the report of the Commission on Declining Enrolments in Ontario (Ontario, 1978).

Writing from a United States perspective and based on a comprehensive computer assisted review of the literature on declining enrolments, Zerchykov wrote that there was "difficulty in assessing the programmatic impact of studies on curricular changes associated with decline". He noted that the major policy issues to receive attention were finance and facilitation "rather than program" (1982:x). Of the 250 bibliographic entries included in his review, only 23 were identified as program related. Of these, 10 dealt with secondary school settings. Two of these focused specifically on programmatic issues, and four identified more general curricular concerns.

Zerchykov and Weaver (1983:307) attributed this lack of attention to program concerns to the fact that decline has been felt first in elementary enrolments. At this level, the integrative nature of the programs coupled with the more generalist nature of the teaching staff made coping less difficult. However, as declining enrolments moved into secondary schools, the concern has been heightened significantly. At this level the curriculum tends to be more differentiated, more discipline specific, and in the hands of subject specialists. Programmatic issues are indeed becoming more prominent in the literature as witnessed by the increasing number of doctoral dissertations that address questions related to secondary school declining enrolments (e.g. Imhoff, 1979; Martin, 1980; Black, 1982; Richardson, 1983; Lloyd-Adams, 1984).

Zerchykov concluded that the general American literature on enrolment decline was composed of "opinion, advice and evidence" (1982:ix). The same is true for the emerging Canadian literature on secondary school programming during decline. While many reports and studies fall conveniently into one of these classes, some include a combination of research evidence and professional opinion and advice.

In the remaining sections of this review, the literature will be examined from the perspective provided in the work of Bussard and Green (1981). This 78-page handbook entitled Planning for Declining Enrollment in Single High School

Districts was based on their observations as they worked with a consortium of six single high school districts facing declining enrolments. Rural, suburban, and city districts were included. Parents, students, teachers, principals, school board members, and superintendents worked within and between their school districts to generate and develop alternative coping strategies. The authors said that "few of the strategies are really radical in terms of being untried". However they were practical. Although this guidebook was no longer available through the National Institute of Education, it had been reproduced in Klein (1983) and was available on microfiche through ERIC (Ed 204 100).

Based on their experiences with the six participating single secondary school systems, Bussard and Green classified the strategies secondary schools used to cope with enrolment declines under three broad categories: (1) strategies generated within the school system, (2) strategies that require co-operation with other school systems, and (3) strategies using educational and community institutions outside the school systems. The following sections of this review draw primarily on United States and Canadian literature within the framework of these three categories.

2.2. Within School System Strategies

While the word system is used to categorize the strategies discussed in this section, it must be remembered that Bussard and Green (1985:1-19) were referring to school systems with one high school. Thus, the coping strategies discussed in this section are mainly within-school alternatives. These include greater use of independent study, combining related courses in the same space and time, modified timetable schedules, increasing the number of required courses and reducing the number of electives, alternate year course scheduling, and recruitment or retraining of teachers to broaden areas of teaching expertise.

2.2.1. Independent Study

Course based strategies include increasing student independence and responsibility for their own studies. Such alternatives were often suggested in the professional literature (e.g. McCarl, 1971; Hughes et al., 1978; Frazier, 1980; Allan, 1983; Davis, 1983a). These may include such alternatives as school based modular courses or independent learning packages (Barker, 1985; MacKinnon, 1987). As well, such recommendations include the use of computers to instruct or manage instruction and the use of alternative technologies (Church, 1980; Black, 1982; Nelson, 1985; Nytes and Musegades, 1985; Seigmund and McFadden, 1985).

2.2.2. Increasing Required Courses/Reducing Elective Courses

Reducing electives and/or increasing required courses was an alternative also noted in the literature. Such actions were also part of the regulation changes made recently by the Government of Ontario in Ontario Schools: Intermediate and Senior Divisions [OSIS] (Ontario, 1984). However, on a negative note, it has been reported that government course regulations specifying what schools must do has a direct limiting effect on the number of options available for small secondary schools and set up management difficulties not experienced by larger secondary schools (Davis and Ryan, 1980; Allan, 1983; Davis, 1986). There has been some indication in the research and professional literature that electives tend to be reduced with decline (Meaney, 1976; Allan, 1983; Richardson, 1983; Davis, 1986). However, it should be noted that the research is not unanimous on this point. Imhoff (1979), in her study of 202 high schools in the North Central Association of Colleges and Schools concluded that decreases in course offerings did not cluster around either the academic, general education, or elective courses but were found across all three in rural small high schools.

2.2.3. Multigrade and Multilevel Courses

By combining students at two or more grade levels, more electives can be offered (Jesser, 1966; Frazier, 1980; Davis, 1986). Ryan, Sackney, and Birnie (1981) reported that this was one of the most common strategies used in small secondary schools in Saskatchewan. The strategy of combining courses and/or levels in the same room at the same time can bring a teacher in contact with more students and may provide more alternatives in the programs. However, it may be fraught with problems for the teacher inexperienced in multi-group teaching. There have been indications that secondary school teachers require assistance in developing effective teaching strategies for such courses (McNair, 1985; Marshall, 1985b; Riggs, 1987).

2.2.4. Staff With Broadened Teaching Expertise

A controversy about using specialist and generalist teachers at the secondary school level was noted in several sources. Ryan, Sackney, and Birnie (1981) presented a strong case for small secondary schools to recruit or retrain their teaching staff as generalists who are well versed in learning processes and alternative teaching strategies. However, Rodekohr (1975) observed that generalist teachers were not more likely to be hired in declining systems. Imhoff (1979) reported that in smaller secondary schools of rural and small communities in north-central United States there was a higher number of teachers teaching outside their fields of preparation. This seemed to happen often without retraining. Davis (1982) suggested that teachers with a combination of generalist and specialist training were considered an asset in Australia.

2.2.5. Amalgamation of Elementary/Secondary Schools

The literature also recommended the consolidation of feeder elementary schools with the local secondary school as a means of survival and an opportunity for sharing teachers expertise across elementary and secondary panels (Ryan, 1976; Allan, 1983). Scharf (1983) examined such consolidation and its impact in rural Saskatchewan. He identified such amalgamation as a popular strategy in that province for maintaining secondary programming in smaller communities.

2.2.6. Modified Scheduling

It has long been recognized that changing the daily, weekly, or yearly schedule to make better use of time and staff resources is possible through such measures as dividing the school year into semesters, trimesters, or quarters (Jesser, 1966). The use of fewer and longer instructional periods, as well as the use of extended days has also been recommended (Bussard and

Green, 1981). The delivery of courses in alternate years was also reported in the literature (Frazier, 1980; Black, 1982; Newton et al., 1982; McNair, 1985; Harte, 1987). However, cautionary caveats regarding the need for long range planning and clear communication of plans to students was stressed for successful implementation. Such measures have been used effectively when coping with increasing enrolments and Bussard and Green (1981) viewed such strategies as valuable in periods of declining enrolments as well.

2.3. Between School System Strategies

Bussard and Green (1981:20-29) described strategies by which two or more school districts co-operated to cope with declining enrolments. Such co-operation could involve bringing together students from various jurisdictions, sharing teachers and/or administrators among schools, providing portable specialized facilities that can move from site to site, or sharing support service staff. Regarding such undertakings, Bussard and Green recommended the following guidelines for neophyte school jurisdictions venturing on such co-operative ventures: "start slowly; work out details ahead of time; develop written agreements; start small or with enrichment programs that don't compete with existing programs; and provide for termination or withdrawal" (1981:21).

2.3.1. Multicampus Programming

Where distance between schools is not excessive it is possible to bring together students from two or more systems. This may provide the number of students required to make courses or programs viable. It also allows for some specialization within each of the participating schools, so that what they could not do individually in terms of programming becomes possible through co-operation. Such arrangements were recommended by Ryan, Sackney, and Birnie (1981) in their study of program delivery in small high schools. Similarly, recommendations for such sharing have been made by Newton, Sackney, and Wilson (1982) in their program recommendations for a school program in Saskatchewan, and by Davis and Ryan (1980) for Northern Ontario schools. As part of his report on small northern schools, Allan (1983) recommended a small school system maintain its two-campus secondary school provided appropriate provincial school funding was made available. Such arrangements are feasible only with reasonable transportation between campuses, as is the case in southern Manitoba where three school jurisdictions co-operate and are within bussing distance for their students (Shaw, 1985).

2.3.2. Specialized Portable Facilities

Mobile vans with specialized teaching facilities that can be moved from school site to school site annually or by terms is another way adjacent school jurisdictions can share resources and broaden program offerings. Successful projects of this nature have been reported in southern Manitoba (Shaw, 1985) and were recommended for Saskatchewan school jurisdictions (Newton, Sackney, and Wilson, 1982) and by Allan (1983) for small Northern Ontario schools.

2.3.3. Shared Teachers/Administrators

As well as pooling students, or sharing portable physical facilities, several school districts can have agreements for sharing staffing. Various forms of talent banks, itinerant teachers, and split salaries and services enable small schools and systems to have access to human resources that might not otherwise be feasible (Ryan, Sackney, and Birnie, 1981). Shared administrators (Connelly and Enns, 1979) and special support service personnel (Melvin, 1979) have been reported to be beneficial for participating jurisdictions.

2.3.4. Amalgamation

Across the country in the 1960s, the principle that bigger was better led to smaller school boards being amalgamated into bigger ones. Amalgamating school systems or parts of systems is the least easily reversed of the many strategies available and is the most politically difficult. Writing in a Saskatchewan context, Melvin (1979) concluded that school jurisdiction consolidation had "gone as far as it can go." Nevertheless, according to Bussard and Green (1981) it remains a strategy with advantages that one should not overlook.

2.4. Outside School System Strategies

As described by Bussard and Green (1981:29-38), the strategies discussed in this section involve the school going beyond the system and other systems to seek supportive partnerships for delivery of quality programming. It may involve co-operative education that links the school with the community businesses to provide opportunities for work place experience as part of course credit. It may involve co-operative ventures with local or regional colleges or universities. Alternative student populations within the community could participate in the secondary school system.

2.4.1. Alternative Student Populations

A school can redefine its student base. Many schools have added programs to attract adult students and offered courses at times suitable for them (Bussard and Green, 1981). Other schools have provided space for senior citizens' groups and given them access to many facilities and to opportunities for working with students. While Connelly and Enns (1979) cautioned that there were a number of planning considerations to take into account when enlarging the student population base with early childhood or adult learners, they generally concluded that a period of declining enrolment was conducive to such initiatives. They suggested further that the expansion of the student base could be accompanied by steps toward community schools.

2.4.2. Community Resources: Co-operative Education

Bussard and Green's (1981) last set of strategies dealt with ways a school could co-operate with other community agencies, businesses, and individuals. They described ways in which the participating schools brought community resources to students (e.g. local artists groups contributing to parts of the curriculum) or sent students out into the community for work-related experiences while receiving school credit. Examples of high school students working with other community agencies to jointly provide community service (e.g. biology students conduct water quality tests; newsletter publication for a community agency) and the use of the school as a community centre were also documented. Davis and Ryan, reporting on their research with northern secondary schools, noted that while co-operative education has been officially endorsed by the Ministry of Education, "the value of co-op courses does not seem to be fully realized by many schools" (1980:256). Difficulty in organizing and implementing such ventures was noted and they suggested that the Ministry of Education actively assist and support schools launching such courses.

2.4.3. Consortia with Senior Governments

Bussard and Green (1981) did not describe specifically the roles of state educational authorities but some of the strategies noted in their presentation included roles for state authorities or other third parties. In Canada in general, and in Ontario in particular, there was often a call for provincial education authorities to assume particular roles and responsibilities to aid small secondary schools (Marshall, 1985b, 1986; Ryan, Sackney, and Birnie, 1981).

As soon as small secondary schools look beyond their own communities or systems there usually arises a need for a third party to assist or co-ordinate regional enterprises. Commonly such would be a provincial or state education authority but it could be a college, university, or larger school system. Based on their examination of factors such as government regulations, local collective agreements, and declining enrolments, Davis and Ryan (1980) recommended that the Ontario Ministry of Education create a file of school-based community programs around the province to foster sharing and alleviate to some degree the constraints on secondary programming. In a similar vein, the Report of the Commission of Inquiry Regarding Small Schools in Northern Ontario recommended that the Ministry of Education "provide direct service to teachers, principals, administrators, and trustees either by Regional services or Co-operative Projects" to the point of seconding staff for specific duties if needed and offering incentives for such sharing (Allan, 1983:16). An example of such regional sharing recommended by Allan in his report was the concept of program councils.

Fryer (1985) reported on the success of two program councils established in Northwestern Ontario for co-operative curriculum development. These larger regional curriculum consortia had been recommended by Connelly and Enns (1979) and Davis and Ryan (1980), and were included in the Allan Report on small Northern Ontario secondary schools (Allan, 1983). Assistance of a state or provincial authority helps to provide greater stability and opportunity for sustained co-operative efforts than small ventures involving only two or three schools. Regional consortia could also provide supervisory services (Bussard and Green, 1981), consultative services (Melvin, 1979), or communication networks (Nelson, 1985; Nytes and Musegades, 1985).

Allan identified the Ontario Ministry of Northern Affairs as another agency whose goals and objectives were conducive to assisting small northern secondary schools cope with the challenge of providing "quality education to all young people in the north". This recommendation included support for the organization and/or extension of projects in co-operative education by "encouraging local industry to participate" (1983:39).

Correspondence and distance education were identified as another area in which the provincial Ministry of Education could extend support for quality programming. Davis and Ryan identified this source of support as one in which the ministry had the potential "to make a significant impact upon secondary school programs" (1980:257). They urged the ministry's then Correspondence Education Branch and the Ontario Educational Communication Authority to take initiatives in making correspondence courses suitable for in-school use and expand the use of technology in the delivery of courses. Other authors have identified the potential of correspondence courses and other forms of distance education as a resource that small secondary schools need to assess and that outside agencies can assist in providing (Allan, 1983; Ryan, Sackney, and Birnie, 1981; Hughes et al., 1978; Davis, 1983a, 1983b). Although new technology has been presented as a great aid to the delivery of courses by distance education, Bates noted that the high use of printed material and the low use of other audiovisual media in distance education was "rather surprising" (1984:4). There was evidence that correspondence courses in a supervised school setting have significantly greater success than those taken by individuals on their own (Balay, 1978).

While technologically enhanced delivery of secondary school programming was gradually increasing and had received some attention in the research literature, the results are somewhat mixed. For example, while Montgomerie (1982) cited positive results in the use of Telidon as an effective educational delivery vehicle for computer based distance education in an introductory high school mechanics course, Szabo (in Montgomerie, 1982:171) was less sanguine about its success and raised the concern of a halo effect that may have existed because of the presence of a shop whenever Telidon was available. Boyd (1983) also cautioned against miseducation through technology and called for an examination of unintended side effects for both students and teachers. Hoyle (1983:64) pointed out that while teachers may utilize technology as an adjunct to their own teaching methods, there were strong attitudinal, professional, and local political barriers. Despite such barriers, Montgomerie maintained "it is no longer a case of whether but when computer based learning is used to deliver distance education" (1982:128). In a similar vein, Allan reported that it had become imperative that projects involving the microcomputer and telecommunications be established to act as a back-up to the programs in the north (1983:25). In a cautionary note, he called for wise utilization with the installation of technologically enhanced delivery, and cited the need for the principal's support, a knowledgeable program facilitator, careful screening of candidates, methods of pacing, and regular monitoring as essential elements for successful implementation (Allan, 1983:24). While development in this area has accelerated rapidly over the past decade, many aspects of successful implementation remain undocumented.

2.5. Emerging Issues

While this review of the literature focused on commonly recommended coping strategies, there were a number of other issues emerging in the literature that appeared relevant to this study. These included responding to growth and decline, effect of school size, and the irreducible curriculum.

2.5.1. Responding to Growth and Decline

Zerchykov and Weaver (1983) said that educational writers of the sixties often viewed growth and decline as mirror images. Decline was viewed simply as growth in reverse. Such views still are reported in the literature. For example, Almeida's (1980) study of Alberta educators found that they thought the planning processes for contraction were similar to those for expansion. Since decline has become a reality, more has been written about the relationship between coping with increasing and decreasing enrolments. There has been an increasing awareness that the processes and procedures involved in coping with growth are not the same as those involved in coping with decline. Abramovitz (1978) concluded the profiles for growth and decline were not symmetrical. She noted that response strategies and administrative skills that proved useful during periods of growth and expansion could prove dysfunctional during periods of decline and contraction. Based on an extensive review and analysis of the American literature on managing declining enrolments, Zerchykov (1982) and Zerchykov and Weaver (1983) concluded that there were qualitative differences between dealing with growth and decline. These included a shifting locus of decision making, reduced time for decision making, the need for a proactive rather than a reactive stance, as well as the reduction of alternatives in new positions and/or organizational structures and resources associated with growth.

The nationwide survey in the United States of 320 school districts by Dembowski (1979) and his associates represented both growth and decline conditions. In their section on programming, they concluded that narrower, more homogeneous curricular offerings resulting from steep decline in course enrolments were not consistent across subject areas. Language arts, social studies, fine arts, and foreign language studies appeared to be the areas most negatively affected by decline. Program quality was most likely to be perceived by educators as deteriorating in jurisdictions where a steep rate of decline had been experienced. Dembowski and Gay noted that "enrollment declines offer opportunities to lower pupil/teacher rations and allocate space to worthy programs" (1980:79). Rodekohr (1975) concluded, on the basis of his study of Colorado school districts experiencing decline, that the pattern of resource allocation differed significantly among growing and declining systems and observed that the rate of innovation was retarded by decline.

Regarding the Ontario context, Connelly and Enns observed "there are reasons why the curriculum planning strategy used during increasing enrollments cannot be reversed and made into a 'drop-off' principle without serious threat to one or other of the basic philosophical curriculum principles adhered to in Ontario" (1979:287). These included:

1) a belief in the individuality of the child and the duty of the schools to fulfil that individuality,

2) a belief in the importance of providing equality of opportunity for all children, and
3) a belief in shared decision making on the purposes and content of the curriculum (1979:286).

In their discussion of attitudes toward change within school systems, Bussard and Green observed:

> . . . growth itself was not seen as a problem, despite the difficulties it imposed. In contrast, decline has always been perceived as a problem with a capital P and there are psychological, logistical, political, and human issues which make managing decline more difficult than managing growth. (1981:7)

2.5.2. Effect of School Size

Bussard and Green stated that, "Dilemmas and problems which affect all single high schools are magnified in a small school" (1981:55), but did not provide direct evidence for this. However, other writers seemed generally to support this contention. For example, Connelly and Enns stated that "their survey of boards showed that the greatest disruption of curriculum offerings was expected to occur in small schools" (1979:288). A literature review of optimal school size (Blowers, 1975) led the author to similar conclusions. However, he noted advantages to being small as well. According to Marshall (1985) some of the benefits of being small included:

- smaller pupil/teacher ratio;
- closer relations between teachers and students;
- more participation in decision making by teachers and students in program development;
- close relations between staff and principal; and
- enhanced potential for individualized instruction.

However, there was consistent agreement in the literature that the small secondary school could not and did not offer the breadth of courses that larger high schools can. Narrowness of curricular scope was often viewed as being qualitatively negative. On this point Marshall (1985a) cautioned against equating breadth of course offerings with quality of educational experience.

2.5.3. The Irreducible Curriculum

When small high schools experience declining enrolments and are forced to consider contraction, the question of what is required and what is optional inevitably arises. Whether the required program components were referred to as "core" (e.g. Crocker and Riggs, 1979) or "foundation program" (e.g. Ontario, 1978), it was an issue that re-emerged in the literature. Hughes et al. (1978:22) in their study of selected declining school districts in the Maritime provinces surveyed educators' opinions on basic curricula, and used the term "irreducible curriculum". This term has been borrowed and used in the surveys and interviews of the present study. In the Newfoundland Task Force on Education, Crocker and Riggs argued for a core curriculum "to define what schools should offer in order to meet the needs of a broader group of pupils than those who currently stay in school, while ensuring that the program does not degenerate into pure vocationalism, or into courses designed solely for their immediate attraction to pupils. They proposed a core curriculum "consisting of three components: an academic component at two levels, a component dealing with the individual and society, and a career-guidance/pre-vocational education component" (Crocker and Riggs, 1979:127). In their academic component they included English, mathematics, sciences (physical and biological), and social studies. In a discussion paper prepared for the B.C. Ministry of Education, Walsh (1980) identified three categories of curriculum components. These he identified as "must", "should", and "might" elements. Included as "musts" were those aspects of program required by the province and that addressed both the normal and special needs of learners. Walsh saw the "should" and "might" components varying from district to district and reflecting the varying social, cultural, and economic factors that contribute to our increasingly pluralistic society. He noted that such an approach required more public input and made program planning more complex. It also appeared that the "shoulds" and "mights" depended in part on the local community's ability to pay as well as to articulate the types of courses that would meet local needs and conditions.

Connelly and Enns discussed the concept of a foundations program and, recognizing risks in establishing such a program, specified five criteria for the development of such guidelines:

1) Individual choice should be retained as a feature of the overall curriculum. While parts of the program might be required, others

should be optional.

2) Local involvement and responsibility should be retained. The principle of local adaptation of the foundations is necessary to meet the diverse range of abilities and interests of students.
3) The foundations program should have a significant level of public acceptance. It should be specified carefully, debated publicly, and introduced slowly with a known time line.
4) The required core of the program should not reflect prejudice or particular ideologies. The content of a required core should, therefore, be drawn from areas where there is clear conformity of opinion or from areas where there is a minimum of subjective personal and ideological effect.
5) The foundations program should exhibit the principles of continuity throughout the K-13 curriculum and should integrate horizontally within the curricular offerings at any one time. It should function as an expanding whole rather than as increasingly specialized and fragmented parts (1979:288).

More recently Melvin, in the Program Policy Proposals: Report of the [Saskatchewan] Core Curriculum Advisory Committee on program policy proposals, recommended that required areas of study from Kindergarten to Grade 12 be "language arts, mathematics, aesthetic education, health education, physical education, science and social studies" (Saskatchewan, 1986:14). In its discussion of balance of time in a school program the committee recommended a sliding scale balance of provincially required and locally determined courses (1986:19). The following chart summarizes the recommendation.

	Provincial Requirements	Locally Determined Course Offerings
Elementary (K-5)	80%	20%
Middle (6-9)	70	30
Secondary (10-12)	55	45

from Saskatchewan (1986:17)

For the secondary grades the committee proposed three categories of courses. These were required courses of study, elective courses from specified areas of study, and unspecified elective courses. The following chart from the report provides a summary of the committee's proposal.

Proposal: The Committee proposes that the following credit* allotment should be considered for Grades 10, 11, and 12:

Grades	10	11	12
Required Courses of Study	1 Language Arts** 1 Mathematics 1 Aesthetic Education 1 Health Education/ Physical Education 1 Science 1 Social Studies	1 Language** Arts	1 Language** Arts
Total	6 credits	2 credits	
Elective Courses From Specified Areas of Study		1 Mathematics area 1 Aesthetic Ed. or Fine Arts area 1 Health Ed./ Physical Ed. area 1 Social Studies area	
Total		5 credits	
Unspecified Elective Courses	Minimum of 2	Minimum of 9	
Grade Standing	Minimum of 8 Credits	Minimum of 16 Credits***	

* 1 credit = 100 hours of classroom instruction

** In designated schools, language arts courses may be offered in the language of instruction.

*** It is proposed that a minimum of 3 credits be taken in the areas of applied or practical arts. This requirement can be met through either of the two categories of elective courses.

from Saskatchewan (1986:25)

This proposal is not too dissimilar from the Ontario graduation diploma requirements set forth in Ontario Schools, Intermediate and Senior Divisons [OSIS] (Ontario, 1984) with 53% provincially mandated and 47% electives that may, in part, be made up from the mandatory listed courses. OSIS also required a full credit in French as a second language and in business or technological studies. The Saskatchewan proposals appeared to reflect the five criteria set forth by Connelly and Enns (1979).

Although defining the irreducible curriculum was not an objective of this study, the concept arises in most planning for declining enrolment in small secondary schools and will be discussed again in Chapter 5.

2.6. The Canadian Context

As part of the literature review carried out as part of this study, the investigators collected articles, papers, reports, documents, and theses that addressed programming in small secondary schools in a Canadian context. Forty such pieces of literature have been included in the review. The degree of attention devoted to program-related issues varied across these sources. Some gave only limited attention to secondary school programming (e.g. Corman, 1979; Husby and Riffel, 1979; Ontario, 1978) while others made it their central focus (Ryan, Sackney and Birnie, 1981). We do not claim that this review of Canadian literature on programming in small rural secondary schools is exhaustive; however, the review has documented the reality of the small isolated secondary school phenomenon from coast to coast and revealed a high degree of congruence among the reported findings across the various provincial jurisdictions. Further, it is representative of a nationwide awareness of and concern about the quality of education provided in such high schools.

Although the review has focused on the period of the late seventies and eighties (88% of the references), five items were included from the late sixties and early seventies (Downey, 1965; Harrison and Downey, 1965; Scharf, 1974; Manitoba Teachers Society, 1975). The literature of the sixties reflected that period's expansionary perspective. Bigger was better. Amalgamation was the solution. Such an attitude was reflected by the tone of Downey's (1965) very critical examination of the 316 small secondary schools with enrolments of fewer than 300 students in the province of Alberta. This study, which was carried out for the Alberta School Trustees' Association, described small secondary schools programs as limited and grossly inadequate. Downey reported that achievement levels of students in such schools were inferior, and attributed this, in part, to the fact that teachers in the smaller rural schools were not as well educated as their urban colleagues. Reporting two decades later to the National Small Schools Symposium in Manitoba, Schreiber and Hathaway (1985) reported that one-third of the province's schools were designated as small. These included only 41 schools offering secondary programming (22 in Grade 1-9 schools, and 19 in Grade 1-12 schools). From their studies and review of the literature, they concluded there was no significant difference in student achievement as a function of school size. They recommended new applications of computer and communication technology be developed to enhance the educational quality in small schools, a similar recommendation to Downey's (1965) proposal to increase the use of available technology.

The literature of the early and mid-seventies tended to be projective in nature. For example, Scharf's (1974) study of the implications of Saskatchewan's rural population for education informed the Saskatchewan School Trustees Association that size of school did impact on programming. With lower student enrolments scope and depth of program offerings become limited. He noted that the programs of smaller schools tended to be academically oriented and appropriate for a minority of the students served and that teachers in such schools were more likely to teach in areas where they had limited expertise and/or experience. However, he did conclude that there was no significant difference between the university marks attained by rural and urban high school graduates.

Even into the mid- and late seventies researchers (e.g. Hughes et al., 1978) reported that decline had been experienced predominantly at the elementary levels. Hughes and his colleagues reported that the impact of decline varied from system to system across the seven school systems they examined in the Maritime provinces. They identified the need to protect the following subjects against the impact of decline: language arts, science, mathematics, and social studies; and they called for a description of the "irreducible curriculum". Commission chairperson Jackson projected the decline in the secondary system into the 1990s as he presented the Report of the Commission on Declining Enrolments in the Province of Ontario (Ontario, 1978), and called for a provincially approved foundation or core program. The report recommended expanded applications of correspondence education, as well as the establishment of co-operative regional consortia to ensure adequate consultative and special education services. Connelly and Enns (1979) based their article on the work of the curriculum task force for CODE [Commission on Declining Enrolments in the Province of Ontario] and predicted that business studies, languages, and multidisciplinary studies would be most negatively affected by declining roles. They also predicted that classes with combined grades and subjects would increase and specialist teachers would decrease. They also recommended upgrading of the provincial correspondence courses, and predicted the greatest curricular disruption was yet to occur at the secondary level. In a similar vein, the report of the task force on declining enrolments for the Manitoba Teachers Society (1975) predicted an increase in multigrade/multicourse teaching situations with a reduction in program offerings and reduced staff morale.

As early as 1976, coping strategies used in rural schools experiencing decline were being documented. Benoit et al. (1976) reported Manitoba schools sharing curriculum development specialists across board jurisdictions, offering courses in alternate years, developing multicampus vocational programming, enhanced use of correspondence courses, and shared mobile special subject facilities. A more recent example of such documentation can be found in the Small High School Study conducted and reported by the Manitoba Department of Education (Manitoba, 1985a/b). Part B of this report identified contact persons and relevant documents as well as administrative practices currently in use in small secondary schools in Manitoba. These included alternative delivery strategies such as multilevel teaching, alternative timetabling models, and ways to enhance staffing and support services.

Studies in Saskatchewan also focused on secondary school program delivery. Ryan, Sackney, and Birnie (1981) produced a report for the Saskatchewan School Trustees Association that examined ways to maintain adequate breadth and depth of small secondary school programs. Based on their survey of system and school administrators as well as teachers, students, and board members from two site visits, they grouped their recommendations under three categories: (1) organizational strategies, (2) technological alternatives, and (3) options for teachers and programs. In the first group, school and system level planning was stressed. Multicampus organizations were also recommended, where feasible. In the last category, itinerant teachers/support specialists to be shared across school systems were proposed, and practically oriented high school courses that emphasized future jobs were recommended. Newton, Sackney, and Wilson (1982) conducted a planning study for one Saskatchewan school division. This study used survey questionnaires and interviews with principals, teachers, board members, and students to gather data. In Chapter 4 of their report to the board, they focused on program delivery. Few innovative practices were identified and minimal between school sharing was noted. The report recommended in-service training for teachers working in multigrade classrooms and called for curricular content and material support for teachers required to teach outside their fields of specialization. Other options recommended included modified timetabling (semestering, trimestering, modular), alternate year course offerings, co-ed classes, multilevel classrooms, and correspondence education. In the area of correspondence education, the investigators recommended the establishment of teacher support systems for students using such courses in their programs. In his review and synthesis of the literature on declining enrolments in Saskatchewan, Melvin (1979) had included a number of the same recommendations.

In a similar vein, Davis and Ryan (1980) prepared a descriptive survey report for the Ontario Ministry of Education in which they examined the impact of ministry regulatory documents, collective agreements, and declining enrolments on secondary school programs. They surveyed 312 Ontario secondary school principals through a questionnaire and followed up with a purposive sampling of interviews with 30 principals. Analyses were made of ministry documents and selected collective agreements between boards and their teachers. They reported that small secondary schools cited declining enrolments as a factor in program change more often than large secondary schools. The most commonly reported changes included multilevel, multigrade courses, alterations in timetabling (often to semestering), reduction of optional courses, and an increase in co-educational classes. These investigators noted that the impact of declining enrolments varied across subject areas and they identified languages as an area most often affected. Regarding correspondence education, Davis and Ryan (1980) reported that school level supervision enhanced student success rate. They recommended the maximization of existing resources through school/system advanced planning and called for alternative funding arrangements for small isolated northern boards of education. They also recommended provincially developed core programs for Grade 13 and basic level students.

In the present review, a few graduate level research reports on secondary programs were identified. These included Meaney (1976), Gorius (1980), Lloyd-Adams (1984), and Simms (1986). Meaney's (1976) study examined the quality of programs offered in fifteen small central high schools in Newfoundland and Labrador. He focused on four correllates of programming: physical facilities, professional staff, student services, and consultative services. Based on data gathered through survey questionnaires to principals, teachers, and students, and interview data from six on-site case studies, Meaney concluded that instructional facilities in such small secondary schools were relatively limited. The school curricula were described as rigid, narrow, and often irrelevant for the students taught. Teachers were deemed to be sufficiently qualified and Meaney also noted that several of the teachers brought to their teaching personal experiences as students in small secondary schools. Student services were described as limited and consultative services grossly inadequate. In spite of these inadequacies, Meaney stated that the results of student achievement from the schools studied were above average.

Gorius (1980) examined the preferences of school trustees and teachers in Saskatchewan regarding strategies for ameliorating problems accentuated by declining enrolment. Survey questionnaire data gathering was employed. Seventy-three trustees and 159 teachers responded. He reported variation of perceptions within as well as between groups, and concluded that both trustees and teachers preferred to attack decline-related problems through policies related to reduction of numbers on the teaching force. Four major areas of concern were identified regarding the development and implementation of such policy. These included (1) management of human resources, (2) funding, (3) organizational, and (4) jurisdictional issues.

In her doctoral dissertation, Lloyd-Adams (1984) analysed the 1979/80 September reports from 568 Ontario secondary schools to assess program offerings. Based on the number of different courses reported on the September reports, and the school enrolments, grade divisions, program orientation, board size and location, she concluded that program diversity was significantly related to size of school, regional location, and program orientation. She found that larger schools reflected greater diversity in program orientation and program offerings. Schools in the midnorthern and northwestern regions of the Ministry of Education were found to have significantly lower levels of program diversity than all other provincial regions.

Simms (1986) examined the impact of school size as a factor in Grade 12 science education in Newfoundland and Labrador and reported an imbalance among the science courses offered in small secondary schools. Biology was offered more often than other sciences. Students in smaller high schools included fewer science courses in their secondary programs. Only in the area of physics was any significant difference noted in the science qualifications of teachers. He noted that teachers in small secondary schools were more likely to be less qualified and that the percentage of their teaching time devoted to science instruction increased with school size. Teacher responses indicated that specialized science facilities, science instruction materials, and science equipment were deficient in small secondary schools of that province.

This analysis of the Canadian literature on programming in small secondary schools during declining student enrolments has demonstrated a broadly based and nationwide interest. Studies of related issues have been supported by provincial Ministry/Departments of Education, school trustee associations, teachers' federations, and small school jurisdictions. Limited attention was given to secondary program concerns prior to 1979. During the early eighties there was a notable increase in the number of graduate research reports, research studies, and articles that focus specifically on secondary school program issues. Pre-1979 reports tended to be projective and predictive in nature. Since then the focus has been largely descriptive. The major data gathering techniques have been survey questionnaires and on-site interviews. School and system based administrators have been the primary source selected for data gathering. Teachers' perceptions on program and related issues have been sampled in a number of studies, and a few reports have included student and school trustee data. Reports have also included analyses of board and ministry documents and demographic statistics. Within system, between systems, and outside system coping strategies were addressed. With the exceptions of Newton et al. (1982; 1987), Crocker and Riggs (1979), and Riggs (1987), most documents reported on one-time studies. Although the paucity of research into program and curriculum issues at the secondary level noted by Corman (1979) is being redressed, much needs to be done in terms of documenting and examining what has actually happened to small secondary programs during decline.

Chapter 3

Small Secondary Schools in the Prairie Provinces

3.1. Introduction

In this chapter, visits to Saskatchewan, Manitoba, and Alberta are reported. In addition, there is an overview of two National Symposia on Small Schools held in Morden and Morris, Manitoba on September 19-20, 1985 and at Quetico Centre near Atikokan, Ontario on September 19-20, 1986. A summary of findings from these on-site visits is found at the end of this section.

As outlined in the terms of reference for this study, the purpose of the inter-provincial visits was to determine the impact of declining enrolment on programming in small secondary schools and to determine coping strategies used to maintain quality program delivery. In particular, attention was focused on the use of distance education. Three general questions were used to guide the interviews in Saskatchewan and Manitoba. These were:

1) What strategies are supported by the Ministry/Department of Education for assisting small secondary schools to cope with program delivery demands?
2) To what degree is distance education/correspondence education used as a support strategy? What are the provincial statistics for this aspect of program delivery? How many students are involved in distance/correspondence education? In which areas/subjects is distance delivery utilized most heavily? What are the student success rates?
3) What are the ministerial concerns regarding programming in small secondary schools? To help clarify this question, the following probes were used if the specific areas were not addressed spontaneously:
    - Does the province have an "irreducible curriculum"?
    - Are there issues related to needs of Native peoples?
    - Are there issues related to students with special needs?
    - Are there issues related to language of instruction?

If there was a positive response, the interviewees were invited to provide clarification of the issues identified.

The provinces of Manitoba and Saskatchewan were chosen for these inter-provincial visits not only because of their geographic proximity to northwestern Ontario but also because of the similar population distributions across a number of smaller rural and semi-rural communities. There also had been indicators from the literature and professional colleagues that both provinces had to address the issue of the small secondary school in the past decade. The first visit was made to Saskatchewan in early July 1985. Visits to Manitoba were made during July and September 1985. When one of the investigators attended a conference in Edmonton, Alberta in May 1985, there was also an opportunity to have briefer interviews with two education officials in Alberta. Information from these interviews supplements some of the information obtained in Saskatchewan and Manitoba.

Saskatchewan. During the week of July 2-5, 1985, a member of the research team interviewed representatives from the Saskatchewan Correspondence School, the Curriculum Development Division, the Regional Services Division, the Policy Planning Division, the Curriculum co-ordinator from Region 3, and two principals of small, Grades 1-12 schools. In addition, earlier discussions with two university professors who had conducted research related to small schools helped to shape this report.

Manitoba. During the week of July 8, 1985 and later in mid-September, interviews were held with representatives of the Correspondence Branch, the Curriculum Development and Implementation Branch, the Regional Services Branch, and the Assistant Deputy Minister in charge of the Program Development and Support Services Division of the Manitoba Department of Education.

3.2. Defining the Small School

To begin at the beginning, one had first to establish what was meant by the term "small school". The following information was drawn from information provided by the Provincial Departments of Education in the provinces that were visited.

Saskatchewan. In the Province of Saskatchewan the Department has categorized its rural schools into three categories based on enrolment per grade ratios. Two types of school organization are of particular interest to the present study: 9-12 schools and 1-12 schools. The table below summarizes the secondary situation in Saskatchewan based on the 1984-85 enrolment statistics.

Table 3.1

Saskatchewan Small School Enrolments

School Organization	Not low	Low	Severely low
Grades 9-12	51 or more students per grade	25-50 students per grade	fewer than 25 students per grade
No. of schools (%)	7 (77.8)	1 (11.1)	1 (11.1)
No. of students (%)	1928 (93)	73 (3.5)	73 (3.5)
Grades 1-12	31 or more students per grade	15-30 students per grade	fewer than 15 students per grade
No. of schools (%)	55 (15.9)	115 (33.3)	176 (50.9)
No. of students (%)	17150 (27.4)	27352 (43.7)	18104 (28.9)

Of the 355 schools serving rural Saskatchewan with secondary school programming, only 62 (17.5%) are not considered small by the department's definition. Of the remaining 293 schools, 116 (32.6%) have low enrolments and 177 (49.8%) have severely low enrolments. Eighty-two per cent of the schools offering secondary education have been defined as small.

The quality of programming in these schools was an identified concern with the department, which has made a commitment to provide "a broad, general education [for] all children in Saskatchewan, regardless of the size of their school or their geographic location" (Saskatchewan, 1984:24-25). While the Curriculum Review Committee that generated this document concurred that "basic mathematics and language skills should continue to be essential components of education" (p.25), they also expressed a need "to extend the concept of what is basic to include additional skills necessary for existence in a complex, pluralistic society" (p.25). However, these skills have not been operationalized very clearly. The small secondary school is part of the reality that the Saskatchewan Department of Education must face in implementing the curricular guidelines set forth in Directions (1984). How the department attempted to address such issues is considered in section 3.3.

Manitoba. As outlined under the formulae for determining a small school under the "Small School Support Program 1985-86", a small high school was defined as one having fewer than 200 students in the four grades from 9 to 12. According to the 1985 report of this program, there were 81 small secondary schools with a total student population of 9157 during the 1984/85 school year. Of these, 56 schools had an enrolment of fewer than 150 students in Grades 9-12. According to the Provincial Annual Report (Manitoba, 1984), about 1/3 of the public schools in the province meet the small school classification. This included both elementary and secondary institutions. By department estimates, such schools accounted for roughly 10% of the province's student population.

Alberta. In Alberta two types of schools were of interest to the present study: (1) those with fewer than 135 students enrolled in a Grades 1 to 9 school, and (2) those with fewer than 180 students in a Grades 1-12 school. According to Schreiber and Hathaway (1985) there were 22 schools in the former category and 19 schools in the latter in the province. In an extreme instance it would be possible to have a school with only three high school teachers, one for each of Grades 10, 11 and 12. As the earlier definitions indicate it was not uncommon in rural Alberta to combine elementary and secondary levels so that a school serves from early child education to Grade 12 graduation.

Summary. The definition of the small secondary school varied from province to province. School organization appeared to be one factor in determining the number of students expected per grade, with Grades 1-12 schools having smaller numbers than Grades 9-12 schools. Generally fewer than 50 students per grade from Grades 9-12 was considered small. Such schools were generally smaller than those included in this study.

3.3. Departmental Support Systems

In this section, strategies employed by the provincial Departments of Education to assist small secondary schools to cope with the demands of program delivery are addressed. The presentation is again organized by province.

Saskatchewan. In discussions with members of the Curriculum Development and the Policy and Planning Divisions, five areas of support were identified: (1) provincial curriculum development processes and procedures, (2) provision of physical facilities, (3) transportation, (4) consultative/instructional materials support, and (5) funding. These support systems were not peculiar to the small, rural secondary schools, but rather were part of the general provincial program for all education. Each is described briefly in the following paragraphs.

The Directions publication (Saskatchewan, 1984) was identified as the product of a multi-agency review process that brought together parents, teachers, federations, trustees, university, and departmental personnel to review the Grades 1-12 curriculum. This comprehensive process was seen as a way of ensuring that the concerns of the small secondary schools were heard and addressed. While the report included sixteen recommendations, there were three of particular interest from the perspective of this study. These addressed the area of students with special needs, the unique needs of northern and Indian/Native students, and the need to clarify the essentials of education. A Core Curriculum Review report was expected by June 1986. While it was anticipated that consensus would be easily obtained at the elementary level, this might not be the case at the secondary level. However, it had been indicated in surveys of rural parents that the secondary program desired for their students was one that provided the foundation for access to university studies.

There were departmental support programs for providing schools with gymnasia, technological, commercial, vocational education facilities and the like. All were identified as areas of commitment. The need to implement the concept of shared facilities was identified as an area of departmental emphasis, as was the concept of the community school.

Departmental funding to provide transportation to ensure students had access to educational facilities was also identified as an important area of support for the small rural school. It was noted that departmental policy had established as a guideline for bussing students a maximum of 1.5 hours of total travel time to and from school. The transportation funding factor was built into the provincial grant structure for education.

In discussing the provision of consultative services and instructional materials, it was pointed out that the Saskatchewan system was more centralized than that of Ontario. The development of departmental guides, handbooks, activity guides, instructional alternatives, and curriculum packages were seen to be more prescriptive in nature. The department representatives reported that they were working closely with selected publishers to develop context relevant texts, (e.g. a social studies text with a Saskatchewan perspective). The Saskatchewan Department of Education was interested in and exploring the kind of curriculum that was best for small schools. They indicated that they were attempting to foster what might be described as field-based curriculum development. The department encouraged shared consultative resources across school divisions. For example, several school divisions may share psychological and educational assessment teams. As well, in the past few years the department had established a cadre of regional curriculum co-ordinators who live and work on-site in the areas of implementation and multigraded instruction. Of note in this area was the pioneering work carried out over the past year in Regions 3 (Yorkton) and 7 (Regina), which attempted to establish the school practitioners' perceived needs through intensive on-site interviews with administrators and teachers in small secondary school settings.

McNair (1985) reported on the findings of semi-structured interviews conducted in six small high schools (fewer than 50 students in Grades 9-12) by the regional director of education and the regional co-ordinators of curriculum in Regions 3 and 7. In interviews it was found that the director of education for the region focused on policy issues, while the principals addressed administrative questions, and the teachers considered instructional aspects. Based on the data generated by these interviews the researchers noted that there were three distinct areas of need: publicity, policy, and in-service. Regarding publicity, the researchers stated that, "parents and the public should be informed of the advantages and strengths inherent in small schools".

In the area of policy, two concerns were identified: the need for the department to recognize and provide for A-B courses (i.e. required courses offered in alternate years), and some recognition of need to be given for teacher preparation and administration time. A number of different topics were identified as areas for in-service work. Included were (1) technical aspects of multigrading, (2) exchange sessions for professional staff, (3) videotapes of successful instructional strategies, and (4) a teacher handbook on multigrading. Based on these findings the regional offices planned to meet with their small secondary school principals to develop appropriate in-service support programs for their schools, and to develop and distribute a booklet supportive of small secondary schools.

Since the Foundation Grant was first introduced in 1973, a school size factor had been built into the formula. Other factors that may have benefitted the small rural secondary school included a declining enrolment adjustment. Through this formula of funding the department attempted to make it possible for each school system to provide a desirable and realistic level and range of programs and services without an unduly high tax rate. Department personnel also stressed the five-year support program, the "Special Education Development Fund" that was being implemented for the first time that year. For the initial year there would be available an additional ten million dollars from which boards could apply to receive additional financial support for special needs or projects. These might include special equipment, instructional, or academic projects. Although this special fund was not designated specifically for small schools, it was seen as a source of additional support. It was hoped that the proposed special funding would encourage school divisions to establish shared consultative resources. For the remaining four years, the amount allocated to this fund was reported to be 35 million dollars annually.

Manitoba. As noted by the Assistant Deputy Minister for the Program and Support Services Division, the Province of Manitoba recognized by the mid-seventies that consolidation and closure of schools was no longer a viable solution for declining enrolments in the provincial school system. As a result the provincial government systematically set about developing a support system for their small schools, most of which were located in rural or semi-rural settings. Identified as worthy of note were the Small Schools

Support Program, the Small Schools Publication, the Regional Services Branch, and funding.

The Small Schools Support Program has been administered by the Regional Services Branch and was composed of two major components: (1) the small schools grant, and (2) a program of small schools pilot projects. The annual small schools workshop, initiated during the mid-seventies and planned and co-ordinated by the Curriculum Development and Implementation Branch, was administered as part of this support program.

The grant formula for small secondary schools was $8,000 + $25 per pupil for every student above 25. In 1984/85 the average size of grant made to high schools was $10,200. The funding provided through this grant was to be used to improve "the quality of education being delivered by the school" (Shaw, 1985b:7). This may be done by "providing human and/or material resources that would not normally be available to the school without the grant" (Shaw, 1985b:7). When a grant has been awarded, it must be used in the school for which the award was made. Thus, a school board could not divert these funds to other schools or purposes. At the secondary level, an analysis of how these grant moneys were used revealed that the major emphasis has been placed on microcomputers and accessories, and on human resources such as teacher aides, specialists, and in-service training. Four other fields were relatively popular: audiovisual equipment, library books, equipment for physical education, and equipment for science. Average grant funding for small secondary schools over the previous three years had been $817,875 annually. In addition, the Small Schools Support Program administered a special small schools pilot project fund. For 1982 to 1985 this part of the program ranged from $63,600 to $100,000. Schools could apply for additional resources from these funds to mount special pilot projects related to improving the quality of education offered. The following examples illustrate the types of pilot projects funded over the previous four years at the secondary level: in 1982/83 the Rolling River School #39 mounted a project on delivering career education programs in a small rural collegiate; the Correspondence School mounted a pilot study to develop a computer managed course in Physics 200 in 1983/84; and in the following year Snow Lake #2309 pilot tested individualized programs through an adult monitoring program, for high school aged students who were functioning at a lower academic level than their peer group. It was of interest to note that in the same year Brandon

University received funding to pilot test a program that involved placing student teachers in small, rural classrooms in southwestern Manitoba.

Reports of such enterprises may be included in the annual small schools workshops. These provincially organized in-service sessions, which focused on issues relevant to small schools, utilized presenters with small school experience. While originally a modest undertaking this project has grown considerably over the previous ten years. For the previous three years, two provincial sites had been utilized with between 700 and 900 elementary and secondary educators participating. When initiated, program costs, meals, and accommodations for the participants were covered by the department. More recently, participants have had to cover their own expenses. The program has continued to be a popular, well-attended event in Manitoba's in-service activities. Of some interest was the lack of involvement of university personnel in past programs. Topics included in these workshops focus on curriculum implementation and teaching practices in multilevel, multigrade classrooms. Programs for each year were developed by the Curriculum Development and Implementation Branch in close co-operation with educators from small schools across the province. The Small Schools Support Program also sponsored the First Provincial Symposium on Small Schools in 1984. The scope of the symposium was expanded to include all provinces and territories in 1985. A summary of this event has been included later in this chapter.

The Regional Services Branch was not a regionalized service. Centred in Winnipeg, this branch encouraged schools and school divisions to share resources. The branch worked with these units to define needs not otherwise addressed. Then they actively assisted with the development and implementation of programs to meet the identified needs. While the branch provided consultative support for principals, teachers, and division administrators, they were not involved in summative evaluation. An example of a special need addressed during the 1983/84 school year was the seconding of expertise in the area of computer education to work with schools such as Neepawa. The areas of expertise represented in the branch included special education, curriculum development and implementation, and computer education. From comments made by department personnel, it appeared that this branch tended to be more actively involved at elementary levels than at secondary levels.

In 1984 the department sponsored and published the first issue of the first volume of their small schools publication, "Manitoba Rural School Review" (Marshall, 1984). Contributions to the review were drawn from the universities, the department, and the field. The review had a threefold purpose: (1) to enhance communication between rural and small school educators in Manitoba, (2) to provide a vehicle for sharing innovative practices in rural and small schools, and (3) to provide educators in rural and small schools with a source of professional literature relevant to their schools (Marshall, 1984:1). Department members viewed this project as part of provincial support for developing a networking system among small, rural schools. However, the publication schedule has proven quite flexible. The second issue was released in the fall of 1985. When queried about the third issue, department members responded somewhat vaguely, relating publication to the availability of material. There was a feeling that a good concept may be in jeopardy from lack of a dedicated editor to seek out and foster the relevant submissions from the pilot projects mentioned earlier and from the workshops presented annually, and to facilitate the publication of the review. One would hope that, for lack of an editor, the review would not be lost. It appeared to be a very timely venture worthy of support.

Alberta. Comments from the department's representatives indicated that capital funding programs were in place to ensure each school was provided with a library, small gymnasium or playroom, administrative and staff space, lunch room, and in some instances study space. The department encouraged co-operation between public and separate boards of education on high-cost programs. The example of High Prairie was cited where the two school systems shared library and cafeteria facilities, as well as a swimming pool and space for vocational education. As well, special support funding programs were in place to assist school units with the purchase of computers. Boards could apply for professional development grants, and officials reported that many were currently using these monies for microcomputer in-service training. In-service training was also available through ACCESS and the provincial universities. As well, special grants were reported for community schools.

3.4. Correspondence Education

The literature is replete with recommendations to use correspondence education as an alternative delivery mode in small secondary schools. This section documents information gathered from the interprovincial visits on the respective provincial correspondence schools.

Saskatchewan. First established in 1925, the provincial Correspondence School reported a staff in 1965 of 29: the principal and vice-principal, 23 permanent teachers, three seconded teachers, and one temporary instructor. There were six support staff and one temporary accounting clerk. The school offered two types of service. Type A service offered courses for which the full instruction was provided by the Correspondence School, and with Type B service the courses were taught and evaluated in the local schools using the correspondence course materials. Included in this latter service was the use of correspondence courses as reference by regular classroom teachers. Both high school and adult students utilized the services made available by the Correspondence School.

Course offerings available through the correspondence school were primarily print oriented, although some courses were complemented by audiotapes (English, modern languages), videocassettes (typing, business applications), 35mm filmstrips (biology, geology), and hands-on experience (typing, computer literacy). The courses offered were strictly academic in nature. It should be noted, however, that the school did offer alternate general level mathematics courses at the Grades 10-12 levels. The major use of computers was to provide computer marked modules in mathematics. Extension to computer managed course modules was under consideration. The use of Telidon facilities was under review. The problems of cost and accessibility in remote areas of the province were major concerns.

The principal of the school reported that the retention rate for high school students was about 60% and the successful completion rate varied from 40-52%. He also noted that over the previous five years the courses offered by the school had undergone major reviews, which had resulted in significant updating that included a number of thematic modules. However, some educators still viewed secondary correspondence education with reservation. For this reason the principal had been actively working to improve the image of the Correspondence School. He held a number of meetings with school administrators in an attempt to inform them about the quality of services available. A study of Grade 12 student achievement scores on selected correspondence courses appeared to demonstrate that the achievement of these students compared favourably with students receiving regular classroom instruction. Schools were encouraged to provide supervision to promote successful completion of correspondence studies. This included: (1) the appointment of a local staff facilitator, (2) provision of regular school time for working on correspondence studies, (3) ensuring students acquired the materials required to complete assignments, (4) monitoring lesson completion, and (5) noting student progress in correspondence courses on report cards.

An analysis of student enrolment data for the 1984/85 year indicated that 57% of the student enrolments were found in the elective courses (3035/5329), 8% (418/5329) were compulsory electives, and 35% (1876/5329) were compulsory courses. Unfortunately, enrolment statistics available from the Correspondence School did not distinguish adult and high school students. Specific data for the students in small school settings were not available. However, the following table indicates the ups and downs of correspondence school enrolments for the period from 1974 to 1984. During those ten years, student registrations ranged from 3001 in 1978/79 to 3925 in 1982/83. The statistics available from the school for 1981/82 were in course rather than student registrations.

Table 3.2

Correspondence Course Enrolments (Saskatchewan)

Grade	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82*	82/83	83/84
9	315	278	282	304	273	332	292	752	278	304
10	1209	1274	1061	876	1070	1165	1239	2669	1383	1195
11	913	926	944	906	768	981	1064	2480	1137	1038
12	1061	1250	1218	932	890	830	864	3239	1127	985
TOTAL	3498	3728	3505	3018	3001	3308	3441	9140	3925	3522

* changed data base: course registrations rather than students

Manitoba. The Correspondence School in Manitoba was initially established in 1927 to offer courses in elementary education (Grades 1 to 6) for students who did not have access to regular schooling. By 1931, courses up to Grade 9 had been added, and by 1937 studies up to Grade 12 were available. Including the director, the school in 1985 numbered eleven professional staff and twelve support staff. A number of educators/writers worked on a fee-for-service basis in course development and delivery. The school offered both elementary and secondary courses. In addition, it provided adult basic education, special interest courses, and high school equivalency. These latter course offerings were designated non-credit studies. Most secondary courses were at the academic level (university entrance), although a number of courses were also offered at the general level. Manitoba teachers who wished to purchase correspondence courses as teaching aids could do so as long as the supply permitted. The director reported that both high school students and adults used the services offered by the Correspondence School.

Course delivery was predominantly print based. The school was in the second year of a pilot project that utilized computer managed instruction. This mode of delivery involved having a site facilitator, i.e. a local teacher who may have limited background in the subject area and a number of individualized learning packages that were computer managed. Selected correspondence courses had supplementary audiovisual materials (e.g. modern languages, biology 200/300). Recently the school added "Career Preparation 105", which is a guidance course developed for students in small secondary schools that do not employ full-time counsellors.

The department viewed correspondence education as a viable alternative delivery mode. Increased registrations over the previous decade seemed to indicate that a similar view was held in the field. The Acting Assistant Director noted that the school had been actively working toward ensuring quality education. Examples given of actions taken in this regard included the abolition of supplemental examinations. Failing students had to repeat all or identified portions of failed courses. As well, the school was attempting to monitor more closely midterm evaluations to identify students in difficulty and to take steps to rectify the situation. The following chart indicates the steady growth of correspondence courses in the Manitoba system. Due to a change in record keeping, the numbers for 1982/83 and 1983/84 are in terms of course registrations rather than student registrations as in the previous years.

Table 3.3

Correspondence Course Enrolments (Manitoba)

Grade	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	** 82/83	** 83/84
9	333	481	362	282	362	308	337	274	653	553
10	1099	1680	1906	2071	2518	2936	3334	3020	3666	3737
11	1071	1384	1353	1525	1691	1830	2100	2009	2491	2441
12	1196	1421	1309	1281	1401	1538	1722	1800	2746	2859
TOTAL	3699	4966	4930	5159	5972	6612	7493	7103	9556	9590

** changed data base: course registrations rather than students

Alberta. Education officials reported that the Distance Education Learning Centre recently renamed from the department's Correspondence School, enrolled about 30,000 students ranging from Grades 1 to 12. It was estimated that about half came from the regular classrooms and were taking courses to augment the offerings available in their schools. Officials reported a 60% completion rate for students enrolled from schools compared with a 25% completion rate for adults who were out of the formal school setting.

The predominant delivery mode was still print based. However, the department officials reported a number of initiatives designed to enhance technologically augmented delivery. For example, a new facility has been established at Barrhead, Alberta the purpose of which is to develop software for computer assisted delivery. Software for the Apple computer has been developed for Mechanics 12, Building Construction 12, English 13, and Biology 10. A concern that was raised focused on the trivial use of technology in school settings without the full realization of its educational potential. Extensive use of television and videotape through Access Alberta and the use of telephone services through AGT were also noted. While extension of services after 5 p.m. could be considered through the government owned and operated telephone system, it was noted that such was a politically hot issue with health services making demands for similar reduced rates. There was some indication that boards in a region might co-operate and work together to hire an expert in distance education. No examples were provided.

3.5. National Small Schools Symposia

The importance of networking, co-operation, and sharing between and among jurisdictions with small secondary schools has been noted by a number of researchers (Allan, 1983). One such step was taken in 1985 to facilitate interprovincial sharing on the topic of small schools with the implementation of the first national small schools symposia. At the time of writing this report a second symposium has been held and a third is under consideration. The following section reports on the first two small school symposia.

The Morris/Morden Symposium. On September 19-20, 1985, representatives from the provincial Ministries/Departments of Education met at the invitation of the Manitoba Department of Education under the direction of John Shaw, co-ordinator of the Small Schools Support Program. Only British Columbia, Prince Edward Island, and the Yukon were not represented. The sessions for the two days were held in Morris and Morden. Both were small communities situated in the rural southern part of Manitoba. As well as the out-of-province guests, there were a number of in-province representatives from the field, the department, and the province's universities.

The program consisted of an overview of the Manitoba Small School Support Program through pilot project presentations, on-site visits to shared industrial arts campuses, mobile instructional units, and a travelling resource unit. Presentations of about thirty minutes were made by each of the visiting provincial representatives. These addressed the question: What is happening in your province/territory regarding small schools? Although the invitation requested representatives to be prepared to discuss initiatives being taken by other organizations toward small schools (e.g. universities, teacher organizations, trustee organizations), this was not addressed.

The symposium underscored the reality of the small school, which had been established by the interprovincial visits. All provincial reports identified the issue of the small school as of current interest. Clearly the definition of a small secondary school differed from province to province. What is considered small in Ontario would be a large secondary school in rural Saskatchewan. The consolidation of feeder elementary schools with the local high school to form Grade 1-12 schools appeared to have been more common in Alberta and Saskatchewan than elsewhere. Student achievement did not appear to be related to school size or to setting, urban or rural.

The symposium emphasized the importance of access to education, particularly secondary education, as a significant determinant of the well-being and longevity of a community. The removal of such educational facilities tended to lead to the demise of a community. Of interest, and very noticeable, were two distinctive attitudes toward the small school issue. There were those who identified the issue as a problem area that required change, and there were those who viewed small size as a viable alternative with strengths that needed to be examined and built upon. Differences due to geographic and political realities were accented by the presentations. The leaders in coping with the small school in a positive manner clearly were Saskatchewan and Manitoba. Those provinces were already considering the programmatic implications of small schools. However, there was only limited documentation in print.

The Quetico Symposium. The theme of the second national symposium held at Quetico Centre near Atikokan, Ontario on September 24-26, 1986 was "Celebrating Small Secondary Schools." This symposium was hosted by the Ontario Ministry of Education and organized by the Northwestern Ontario Regional Office under the direction of Roy Houghton, Regional Director, with the assistance of Mrs. Joanne Farkas, Education Officer. The conference objectives as outlined in the program were:

1. To examine current practices, viable programs and patterns of successful organization in small secondary schools.
2. To learn of actual or planned initiatives and policies among the provinces and territories to enhance programs in small schools.
3. To discuss initiatives of the Ontario Ministry of Education related to small secondary schools (Program Councils) and of the Ministry of Northern Development and Mines (Incentive Grants).
4. To explore solutions to identified problems in administration, organization, and programming in small secondary schools.
5. To discuss research on small secondary schools and its implications for practice.

The symposium included both general and concurrent sessions at the Quetico Conference Centre in northwestern Ontario. As well, participants toured the nearby Atikokan High School, which was noted for its Outers program based on the Outward Bound philosophy and designed to develop individual character and capacity for service by providing challenges in the outdoors for the participating youth. The conference keynote address, "From Rhetoric to Action: Forces Affecting Small Schools in the Coming Decade", was delivered by Dr. David Marshall, formerly with the Manitoba Department of Education Regional Office and currently Dean of Education at Nipissing University College in North Bay, Ontario.

Attending the symposium were sixteen representatives from the various Departments of Education for each of the ten provinces and the Northwest Territories. Other participants included representatives from the Ontario Independent Learning Centre (formerly the Correspondence Education Branch), the Ontario Regional Education Office, Lakehead University, local directors of education, and secondary principals.

In addition to the forty-minute concurrent sessions on local initiatives on Thursday morning, there were presentations as at the 1985 symposium by each of the visiting provincial representatives. The latter sessions were held on Thursday evening and Friday morning. Each consisted of an update of developments with regard to small schools in their province or territory and policy directions for the future. The presentations often echoed the points raised by Dr. Marshall in his keynote address. The small secondary school was considered vital to the community it served. Government and educators have to co-operate to minimize the negative effects of small size. The focus must be on how to make small secondary schools work effectively to ensure access to quality education for the nations's youth.

The Quetico symposium provided a context for the continuation of the interprovincial exchange launched at Morris and Morden, Manitoba in 1985. The importance of continued networking at a national level was addressed in the closing session of the symposium by John Shaw, co-ordinator of the Manitoba Small Schools Support Program. While participants were enthusiastic about the value of such meetings, concerns were raised about finances for future symposia. Only a tentative proposal from Alberta to consider hosting a third symposium emerged from the discussions. Clearly the future of continued interprovincial discussions on issues related to small schools in this type of

development, provision of physical facilities, transportation, consultative/ instructional material support, and funding programs. During the early eighties Saskatchewan introduced a targeted funding support program embarking upon a planning program to cope with lower enrolments. The department in Manitoba had generated a number of specific strategies designed to support small school innovation. These included the creation of a Regional Services Branch that administered the small schools grant program and the small schools pilot project program. As well, an annual provincial small schools workshop was initiated in the mid-seventies, and a small schools publication was commenced in 1984 to share ideas and encourage networking among small schools.

Correspondence Education. Across the prairie provinces, the use of correspondence education grew over the decade from 1975-1984. However, available statistics did not always distinguish day school students from other users. The primary mode of delivery was and continued to be print based. There had been some augmentation through audio and video tapes and coloured slides. The use of computer assisted instruction was in the developmental phases. A general conclusion that emerged from the interviews with representatives from the three provinces was that in-school support was essential for successful implementation and that this mode of delivery could be used more effectively.

The small secondary school was clearly very much a part of the prairie province educational experience. Such schools were accepted as a normal part of the provincial system and were viewed as significant elements of any attempt to revitalize smaller rural communities. While the challenges of operating such schools were recognized, they tended not to be considered in terms of problems.

Chapter 4
Enrolment Data and Survey Findings

In this chapter the findings based on the survey of principals, teachers, and Grade 12 students are reported. These include information about both the participants and their observations of the impact of decline on program delivery in small northern secondary schools. As well, the findings on subject enrolments based on analyses of the September reports for the participating schools have been included. In many cases these were confirmed, and in some instances clarified by the observations reported by the educators and the students on the survey, and in the interviews.

The presentation of these findings has been organized in the following manner. First the results of the analyses of the September reports are considered in sections 4.1. and 4.2. This is followed by descriptions of the participants from the questionnaire surveys in section 4.3. Then the opinions and perceptions of the three groups of participants on program delivery during a period of declining enrolments as stated in the questionnares are examined in section 4.4. A summary of the highlights of the findings in section 4.5. concludes this chapter.

Data From the September Reports

4.1. School Enrolment Trends

As part of the present study, selected statistical enrolment data from 1975 to 1984 were examined. The Ministry of Education reported that the provincial school population declined from 2 043 084 to 1 850 236 during this period (Ontario, 1987). Secondary enrolments peaked in 1978 at 680 571 and dropped to 639 840 in 1984. While the general pattern had been one of decline, individual school populations varied and some experienced growth in their enrolments. The following data were drawn from the September reports (which

Table 4.1

School Enrolment Trends: 1975-1984

School	Sept. 1975	Sept. High	Sept. Low	Sept. 1984	High to Low[4] % change
Northeastern Region	25 961	26 128 (1976)	20 423 (1984)	20 423	-22
Cobalt-Haileybury	295	304 (1978)	175 (1983)	203	-42
Cochrane[1]	733	733 (1979)	537 (1984)	537	-27
Englehart	373	373 (1975)	248 (1981)	265	-34
McElligott	365	396 (1978)	162 (1984)	162	-59
Northern	584	584 (1975)	455 (1984)	455	-22
Northern Lights[2]	156	230 (1984)	156 (1976)	230	+32
Smooth Rock Falls	215	242 (1979)	60 (1984)	60	-75
Midnorthern Region	27 761	27 761 (1975)	22 426 (1984)	22 426	-19
Chapleau	355	364 (1976)	249 (1984)	249	-32
W.C. Eaket	723	746 (1976)	461 (1984)	461	-38
French River	431	431 (1975)	237 (1983)	250	-45
Hornepayne	103	127 (1981)	89 (1976)	125	+30
Michipicoten	585	585 (1975)	451 (1981)	520	-23
Northwestern Region	17 760	18 046 (1976)	15 414 (1984)	15 414	-15
Atikokan	595	603 (1976)	373 (1982)	391	-38
Geraldton	701	711 (1976)	446 (1983)	468	-37
Ignace[3]	163	199 (1984)	163 (1978)	199	+18
Lake Superior	436	436 (1975)	321 (1984)	321	-26
Manitouwadge	281	361 (1984)	268 (1978)	361	+26
Marathon	207	249 (1976)	204 (1983)	227	-18
Nipigon-Red Rock	468	476 (1977)	406 (1984)	406	-15
Queen Elizabeth	420	457 (1977)	335 (1981)	413	-27
Rainy River	274	274 (1975)	224 (1983)	228	-18
Red Lake	500	500 (1975)	381 (1981)	391	-24

[1] Earliest data provided was Sept. 1979.

[2] Earliest data available Sept. 1976 .

[3] First column enrolment data is for Sept. 1978, the first year with full Grades 9-13 program.

[4] "+" enrolment increased from low to high.

were provided by the Ministry of Education) for the 22 participating small secondary schools. Table 4.1 provides a summary of the key enrolment years and the pattern of enrolment trends across the schools by region.

In columns 1 and 4, the school enrolments have been listed for 1975 and 1984. Columns 2 and 3 record the high and low enrolments and identify the years when each occurred. The final column indicates the direction and percentage change from high to low enrolments years. A negative quantity indicates a decline and a positive number reveals a growth in school enrolment.

The table reveals that while enrolments across the three regions generally declined, four schools have experienced increased student numbers over the decade. The percentage change in student enrolments for the remaining eighteen schools ranged from a 15% to a 75% decline. The median percentage enrolment change for all twenty-two schools was -26%. Clearly, individual communities have their own histories of response to general economic conditions (e.g. mine opening/closing; forest industry expansion/contraction, increasing enrolments of Native students, and accommodation of the educational system to Franco-Ontarian, Roman Catholic, and special education interests). Thus, within the provincial and regional decline, each of the participating schools experienced enrolment changes that reflected local political and economic conditions. In addition to general enrolment changes, we examined student enrolments by subject area. The following section reports our findings on subject area enrolments.

4.2. Subject Enrolment Trends

The survey of the literature revealed that previous researchers had found that the impact of school enrolment declines varied across the subject areas. To determine whether this was so in our sample, we randomly selected four northwestern Ontario schools, and collapsed the student enrolments across the schools by subject area for each division (Intermediate: Grades 9-10; Senior: Grades 11-12). Subject area enrolments were calculated as proportions of the total enrolment for each division to ascertain whether a trend existed. Since the September report for 1976 for one of the schools was not available for analysis, the years included were 1978, 1980, 1982, and 1984. Statistics for 1983 and 1985 were obtained from the local regional office and included in the analysis. Table 4.2 summarizes the total student enrolments across the four schools by division for the years examined.

Table 4.2

1978-85 Total Enrolment (T.E.) by Division
In Four Selected Northwestern Ontario Secondary Schools

Year	1978	1980	1982	1983	1984	1985
Intermediate Division (9-10)	1003	858	826	836	746	728
Senior Division (11-12)	779	650	659	621	652	657

The chart documents not only the general decline but also the marked attrition in student numbers between the intermediate and senior divisions, which intensifies the impact of declining enrolment on viable program offerings.

4.2.1. Intermediate Division Subject Area Enrolments

Since course offerings varied across the four schools in the areas of Arts (music, theatre, visual), Business (e.g. accounting, typing, consumer studies, marketing, or shorthand), Technical Studies (e.g. computer technology, mechanics, construction, electricity), the enrolment numbers again were collapsed to provide the basis for an examination of general trends. Table 4.3 provides a summary of the student enrolments in the Intermediate division by subject area. Since studies in English and mathematics were compulsory at this level, those subjects were used as base lines. An examination of the proportions of total enrolment in these areas reveals a fairly stable pattern. The inclusion of remedial courses in some schools in these areas results in some double counting and explains an index value greater than one.

The table reveals a full enrolment pattern in student enrolments in science as well as mathematics and English. There were heavy stable enrolments in business, geography, history, and physical education. While technical studies maintained a strong student enrolment, it declined noticeably from 90% to 70%

Table 4.3

1978-85 Enrolment in Intermediate Subject Areas and As a Proportion of the Total Enrolment (T.E.) in Grades 9/10

Year	1978	1980	1982	1983	1984	1985
ARTS						
Number of students	238	144	134	160	224	443
Proportion of T.E.	0.24	0.17	0.16	0.19	0.30	0.61
BUSINESS						
Number of students	766	698	617	469	499	543
Proportion of T.E.	0.76	0.81	0.75	0.56	0.67	0.75
COMPUTER STUDIES						
Number of students	72	29	71	72	125	190
Proportion of T.E.	0.07	0.03	0.09	0.09	0.17	0.26
FAMILY STUDIES						
Number of students	249	268	190	176	152	140
Proportion of T.E.	0.25	0.31	0.23	0.21	0.20	0.19
ENGLISH						
Number of students	1148	872	820	842	922	793
Proportion of T.E.	1.14	1.02	0.99	1.01	1.24	1.09
FRENCH						
Number of students	310	215	308	296	379	392
Proportion of T.E.	0.31	0.25	0.37	0.35	0.51	0.54
GEOGRAPHY						
Number of students	736	611	474	660	521	480
Proportion of T.E.	0.73	0.71	0.57	0.79	0.70	0.66
HISTORY						
Number of students	775	658	628	578	541	476
Proportion of T.E.	0.77	0.77	0.76	0.69	0.73	0.65
TECHNICAL STUDIES						
Number of students	924	699	682	722	604	469
Proportion of T.E.	0.92	0.81	0.83	0.86	0.81	0.64
MATHEMATICS						
Number of students	1154	946	868	885	870	764
Proportion of T.E.	1.15	1.10	1.05	1.06	1.17	1.05
PHYS. ED. AND HEALTH						
Number of students	761	712	564	625	617	588
Proportion of T.E.	0.76	0.83	0.68	0.75	0.83	0.81
SCIENCE						
Number of students	1003	819	736	758	742	746
Proportion of T.E.	1.00	0.95	0.89	0.91	0.99	1.02

Figure 4.1
Intermediate Divison Subjects with Full Enrolment Indices

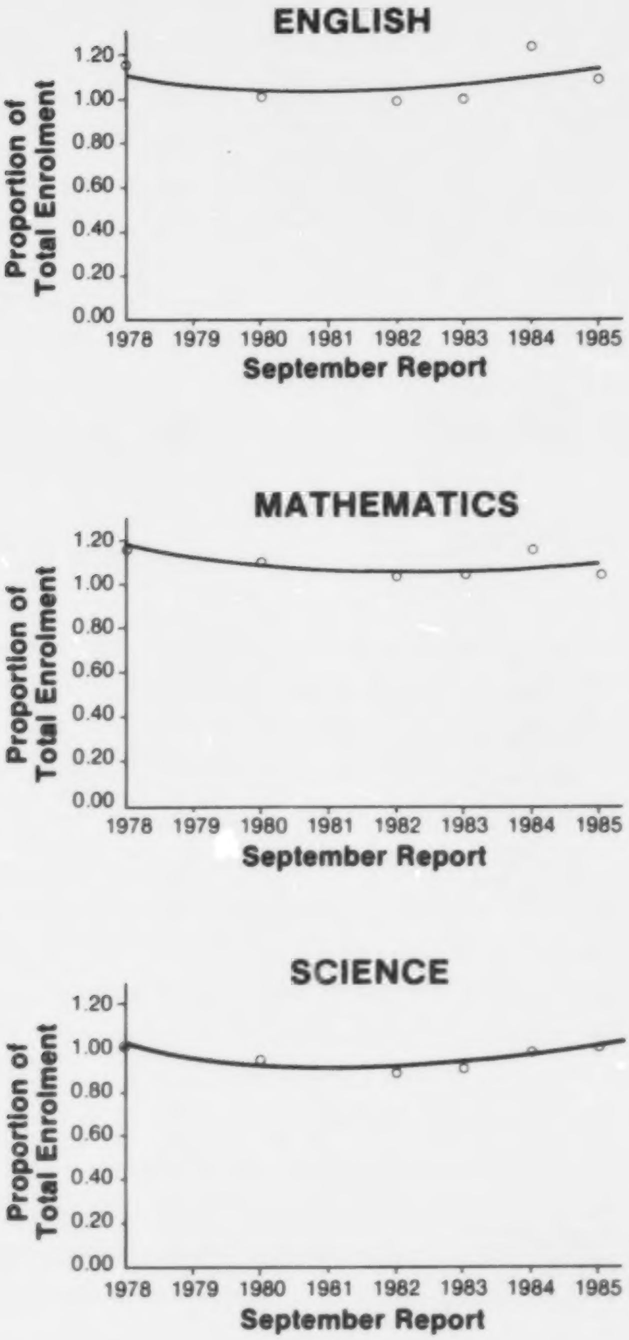


Figure 4.2
Intermediate Division Subjects
with Heavy Enrolment Indices

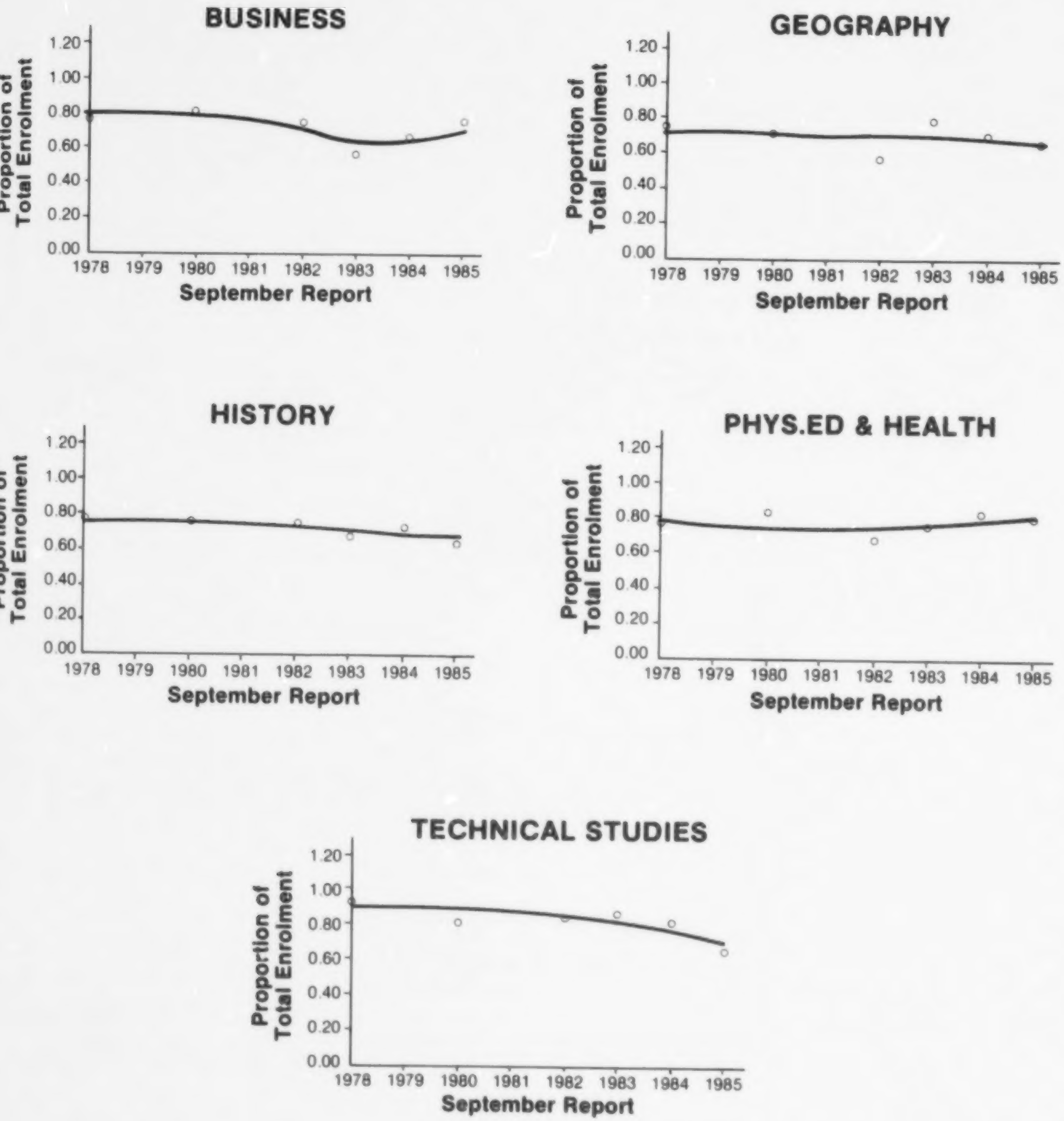
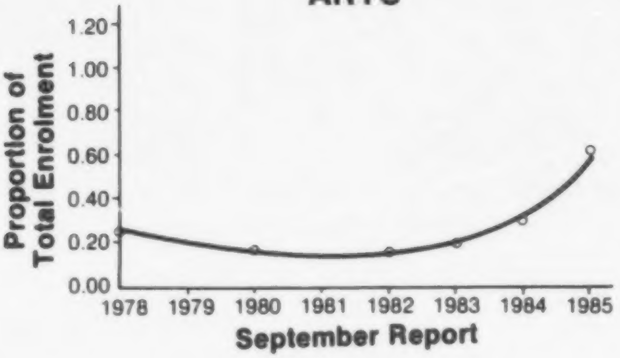


Figure 4.3

Intermediate Division Subjects with Moderate Enrolment Indices

ARTS



FRENCH

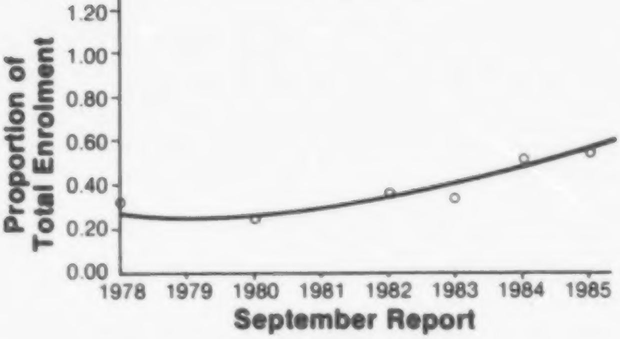
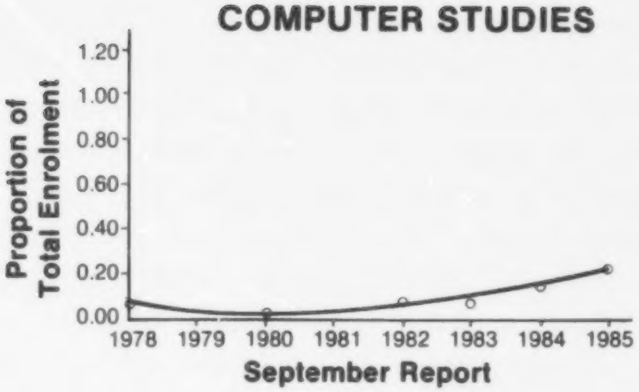
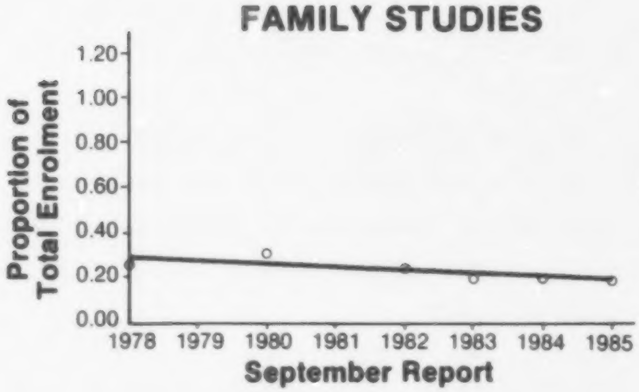


Figure 4.4
Intermediate Division Subjects with Light Enrolment Indices


COMPUTER STUDIES


FAMILY STUDIES

of the students over the period from 1978 to 1985. Studies in French showed a modest growth from 30% to 50% of the students enrolled. This growth in French as a second language varied from research findings reported in the United States literature, and reflected the Ontario requirement of one full course in French at the intermediate level in OSIS (Ontario, 1984). Areas with light enrolments included the Arts, computers, and family studies. Of these three, however, Arts and computer studies showed clear growth trends during the early eighties. As indicated later in this chapter in the analysis of the survey data, this growth is attributable in part to the funds made available through the Educap grants recommended in the Allan report (See section 4.5.). Family studies appeared to be an area experiencing a continuing slow decline even though funds from the Educap grants were also allocated to local improvements in this area.

The accompanying graphs (Figures 4.1, 4.2, 4.3, 4.4) illustrate the level and trends of enrolments in various subject areas. A horizontal line indicates that the subject area maintained the same proportion of students throughout the period, that is, the trend of enrolment in the subject area was the same as the trend of total enrolment for the division. A downward line indicates that the subject area enrolment decreased relative to the total enrolment in the grades, while an upward line indicates an increase relative to the total enrolment. These figures graphically demonstrate variation across the subject areas in terms of both the proportion of the students who enrolled and the trend of that enrolment from 1978 to 1985.

4.2.2. Senior Division Subject Area Enrolments

At the senior level, quite a different picture emerged from the analysis of the student enrolment by subject area. As in the analysis of the intermediate data, the numbers reported were generated by combining the student enrolments across the four schools in each subject area. Table 4.4 provides a summary of the findings from these analyses.

Table 4.4 makes apparent that only one subject area continued to command full enrolment: English. The results reflected the mandatory study of English in all secondary grades as set forth for diploma requirements in OSIS (Ontario,

Table 4.4

1978-85 Enrolment in the Senior Subject Areas and
As a Proportion of the Total Enrolment (T.E.) in Grades 11/12

Year	1978	1980	1982	1983	1984	1985
ARTS						
Number of students	98	80	89	99	125	113
Proportion of T.E.	0.13	0.12	0.14	0.16	0.19	0.17
BUSINESS						
Number of students	526	406	436	340	225	382
Proportion of T.E.	0.68	0.62	0.66	0.55	0.35	0.58
COMPUTER STUDIES						
Number of students	0	40	114	147	107	87
Proportion of T.E.	0.00	0.06	0.17	0.24	0.16	0.13
FAMILY STUDIES						
Number of students	157	43	7	13	0	2
Proportion of T.E.	0.20	0.07	0.01	0.02	0.00	0.00
ENGLISH						
Number of students	738	744	745	662	669	641
Proportion of T.E.	0.95	1.14	1.13	1.07	1.03	0.98
FRENCH						
Number of students	85	90	85	83	105	87
Proportion of T.E.	0.11	0.14	0.13	0.13	0.16	0.13
GEOGRAPHY						
Number of students	447	336	209	174	125	143
Proportion of T.E.	0.57	0.52	0.32	0.28	0.19	0.22
HISTORY						
Number of students	586	553	376	378	324	350
Proportion of T.E.	0.75	0.85	0.57	0.61	0.50	0.53
TECHNICAL STUDIES						
Number of students	284	305	268	274	268	358
Proportion of T.E.	0.36	0.47	0.41	0.44	0.41	0.54
MATHEMATICS						
Number of students	627	565	542	485	525	515
Proportion of T.E.	0.80	0.87	0.82	0.78	0.81	0.78
PHYS. ED. AND HEALTH						
Number of students	455	484	383	346	307	394
Proportion of T.E.	0.58	0.74	0.58	0.56	0.47	0.60
SCIENCE						
Number of students	560	477	393	440	545	556
Proportion of T.E.	0.72	0.73	0.60	0.71	0.84	0.85

Figure 4.5
Senior Division Subjects with Full Enrolment Indices

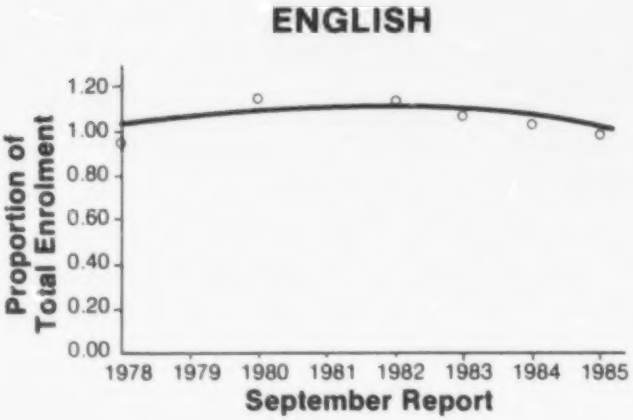


Figure 4.6

Senior Division Subjects with Heavy Enrolment Indices

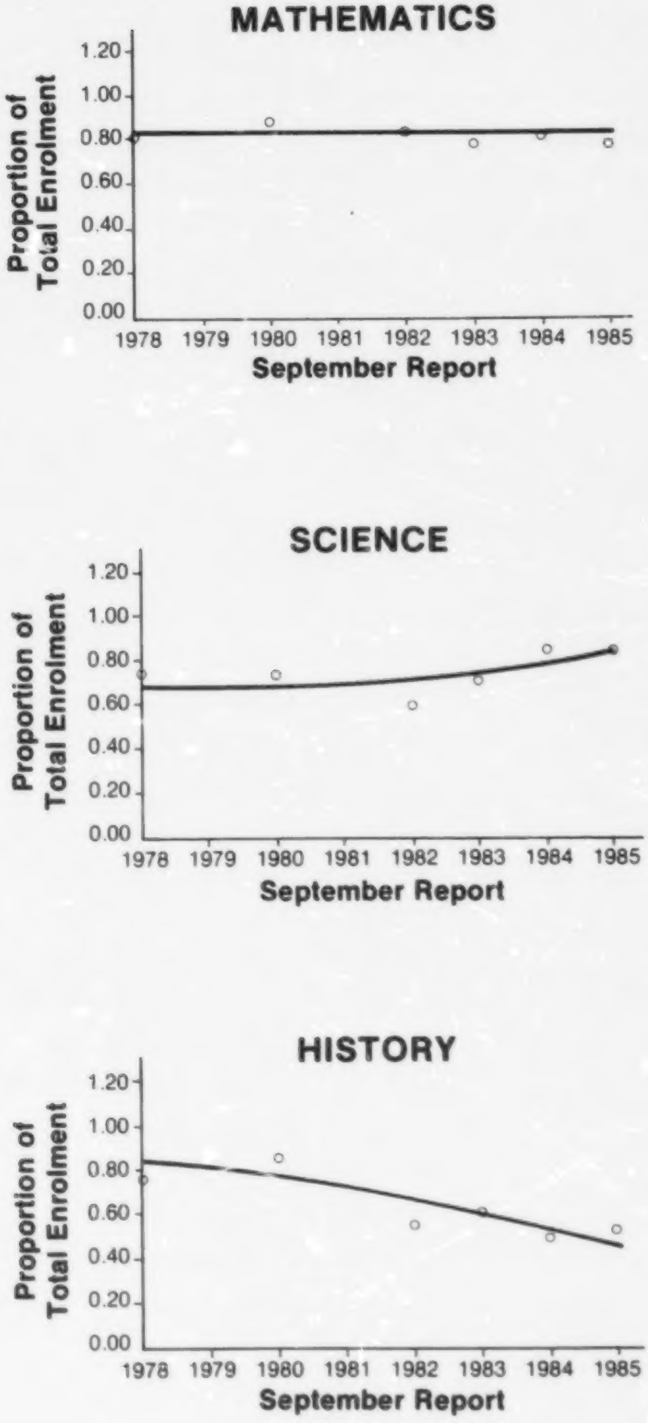


Figure 4.7

Senior Division Subjects with Moderate Enrolment Indices

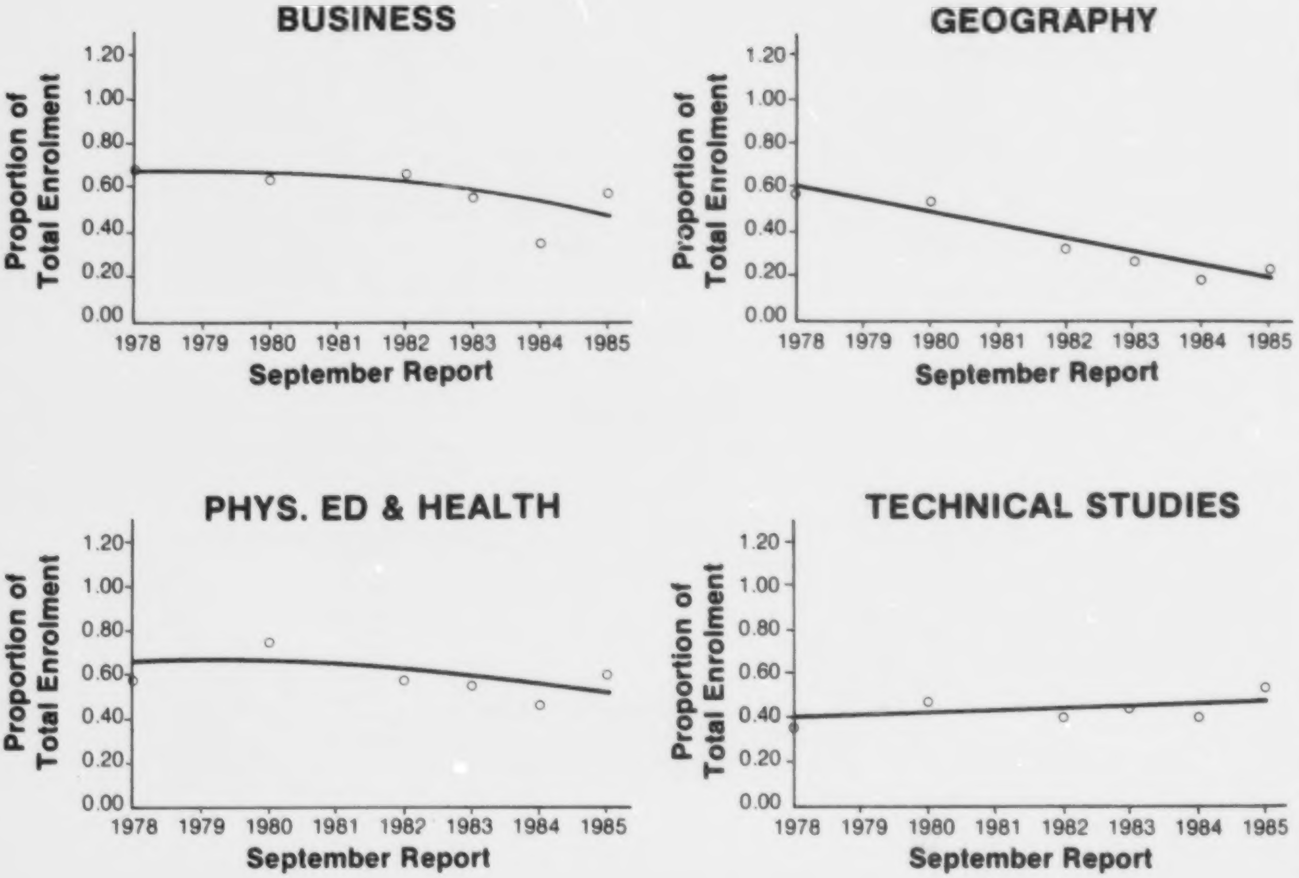
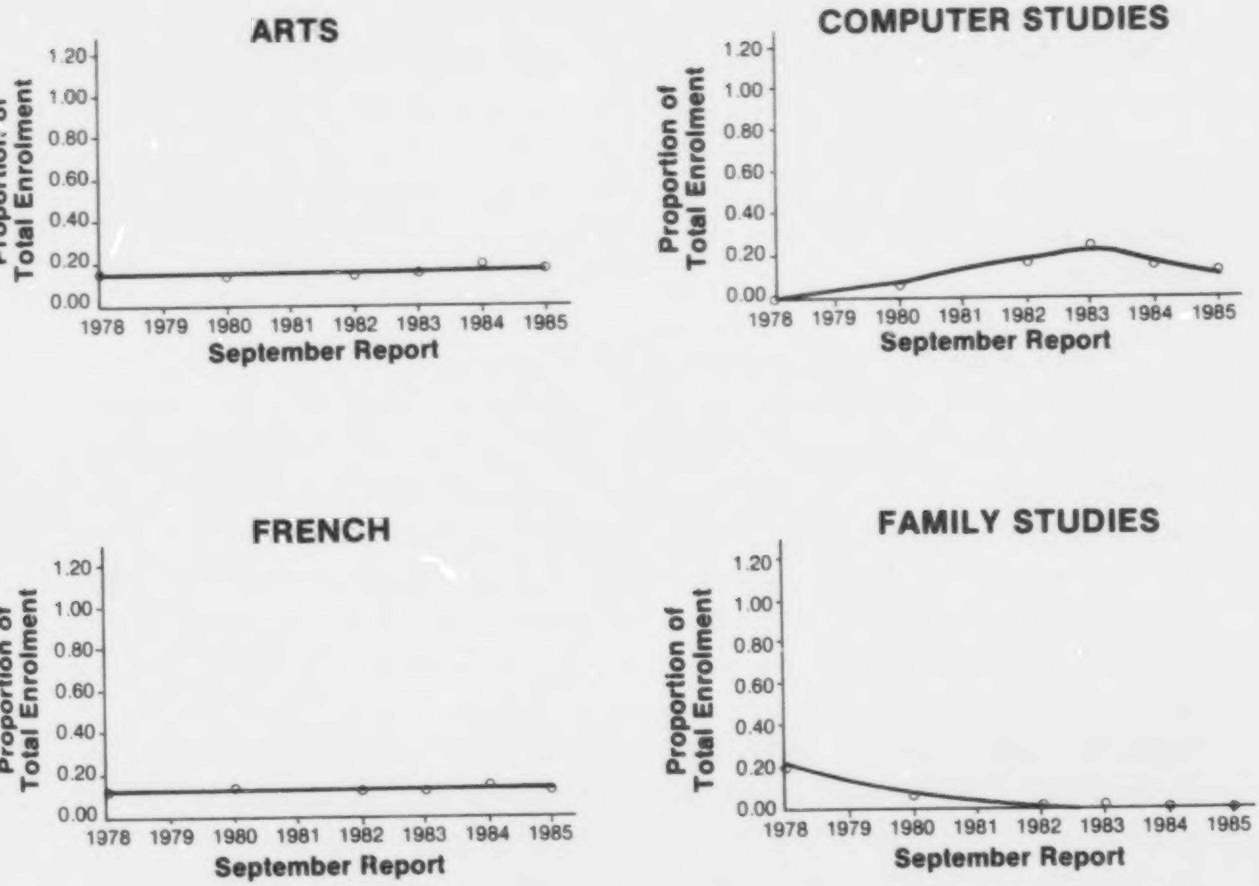


Figure 4.8

Senior Division Subjects with Light Enrolment Indices



1984). Mathematics and science maintained heavy and fairly stable enrolments that included 70% to 90% of the senior student body. Having stated that, one must remember that the statement is based on the combined enrolment in all sciences (e.g. biology, chemistry, geology, physics) and both Grade 11 and Grade 12 mathematics. As revealed in the interview data there were significant variations within these subject areas. These will be discussed further in chapter 5. Enrolments in business, physical education, and technical studies maintained a fairly stable, moderate enrolment. In business there was some indication of slight decline; however, enrolments in these areas included about 60% of the student numbers. Again a word of caution is in order since the index scores generated have been based on composite numbers and do not reflect the idiosyncracies of specific courses. In this instance, as well, data generated from the interviews provided a more detailed picture. Enrolments in physical education indicated that about 60% of the senior students included courses in physical education as part of their programs. Technical studies also appeared quite stable with a moderate enrolment of between 40% and 50% of the students including such studies as part of their programs.

It is interesting to note that between 1978 and 1985 enrolments in history declined from a heavy enrolment of 80% to 90% to a moderate enrolment of 50%. The onset of this decline appears to have set in about 1982. An even more marked decline is indicated in the area of geography where enrolments dropped from a moderate 60% to a light 20% between 1978 and 1985. Other areas reflecting light enrolments included the Arts where there was some indication of slight growth from 10% in the late seventies to 20% of the students enrolled in such studies by the mid-eighties. In the schools included in this sample, computer studies began at the senior level in the early eighties. Enrolment indices show an initial growth period followed by a decline in student numbers in these courses. Between 1983 and 1985 the number of students enrolled dropped from 24% to 13% of student populations. Of all the courses, the area most gravely affected was family studies. A light enrolment of 20% in 1978 declined to 0 in 1982 and there were no senior level classes in this area in these schools between 1982 and 1985. The accompanying subject area enrolment graphs (Figures 4.5, 4.6, 4.7, 4.8) for the senior division illustrate the variation across the subject area and clearly identify the subjects that have experienced significant decline (computer studies, family studies, geography, history).

Clearly factors other than declining enrolments have contributed to the variation across the subject areas reported in this section. These include diploma requirements, and policies on levels of course difficulty. For example, the regulations required the inclusion of courses in business studies and technological studies. However, family studies courses are included under the social science requirement of one course, which places such courses in competition with studies in areas such as geography, history, law, and Native studies, or world religions.

In this section, information drawn from the September reports has been presented for four small secondary schools. In the next section, we begin our report of the data generated by the questionnaire survey phase of this study.

Findings From the Surveys

4.3. Information about Participants

The data generated by the survey questionnaires provided demographic and professional information about the participants as well as their perceptions and opinions about the impact of declining enrolments on program delivery and related program information. In this section, the characteristics of the three cohorts of respondents have been summarized.

4.3.1. Principals

Of the twenty-two principals surveyed, all responded. Twenty-one used the questionnaire provided. One principal responded with a personal report that addressed several of the issues contained in the questionnaire but did not provide the demographic information. The summary provided in Table 4.5 of information about the principals' gender, age, years of classroom and administrative experience, and number of years as principal of the present school was based on the responses of 21 of the principals.

Table 4.5

Participant Information: The Principals

Sex

Male:	18	86%
Female:	3	14%
Total:	21	100%

Education

Bachelor's Degree	10	48%
Master's Degree	11	52%
M.Ed. 10		
M.Sc. 1		

Age	Number	
35-40	3	16%
41-45	4	21%
46-50	8	42%
51-55	2	10.5%
56-60	2	10.5%
Total	19	
Mean	46 years	
Median	46 years	
Range	36-59 years	

Classroom Experience

Years	Number	
5-10	4	19%
11-15	5	24%
16-20	5	24%
21-25	5	24%
26-30	2	9%
Total	21	
Mean	17	
Median	16 years	
Range	7-30 years	

Administrative Experience

Years	Number	
1-5	3	14%
6-10	4	19%
11-15	8	38%
16-20	6	29%
Total	21	
Mean	12 years	
Median	13 years	
Range	1-20 years	

Principal of Present School

Years	Number	
1-5	8	40%
6-10	5	25%
11-15	6	30%
16-20	1	5%
Total	20	
Mean	8 years	
Median	6 years	
Range	1-18 years	

A study of Table 4.5 reveals that the principals of the secondary schools included in this study were predominantly male (18:85%) and ranged in age from 36 to 59 with the majority (14:74%) under age 50. The average and median age was 46. Fifty-two per cent (11) of the principals held graduate degrees. Of these, 91% (10) held Master of Education degrees and one held a Master of Science degree. All twenty-one held Part One of the Principals' Certificate and 81% (17) possessed Part Two. Forty-three per cent (9) reported holding

Supervisory Officers' papers. Years of classroom experience varied from 7 to 30 with an average of 17 years of teaching. While years of administrative experience ranged from 1 to 20, sixty-seven per cent (14) reported more than 10 years of experience in administrative assignments. Although the average number of years in administration was 12, sixty-five per cent (13) of the principals had spent fewer than 10 years in their present assignments.

4.3.2. Teachers

As reported earlier in Chapter One, 312 of the 480 teachers included in the survey responded to the questionnaire. This represented a 65% response rate, the lowest of the three groups. However, the distribution of the returns reflected the regional representation of the study population of secondary teachers (N=480), and was considered a valid representation of the opinions and perceptions of the teachers who work in small northern high schools in Ontario. It should be noted that all respondents did not complete all questions on the survey; thus, the reader will note some variance in the sample size "n" indicated for the items reported in summary Table 4.6 below.

The results of the survey indicated a stable teaching force that was predominantly male (72%) and fairly evenly distributed across the 5-year age cohorts from 23 to 63. The majority of these secondary teachers (72%) were in their thirties and forties. About 13% (33) reported being under age 30, and 15% (39) reported ages over 50. The average age was 40.

The majority of these educators (83%:213) held three year undergraduate degrees, with 4% (10) holding honours degrees and 10% (26) reporting completed graduate degrees. Included in the latter were Master of Education degrees (5%:13), Master of Arts in selected teaching subjects (3%:8), Master of Science (1%:3) and Master of Library Science (1%:2). These degrees have been acquired in most instances from universities in the Ontario system (87%:220).

Of these, 79% (173) of the teachers are graduates of Lakehead, Western, Queen's, Toronto, or Laurentian. Educators who held degrees from other Canadian universities account for 7% (18) of the teaching force, and 6% (15) were attained from universities outside Canada. About a third of these teachers completed their degrees in the fifties (4%) and sixties (29%). The

Table 4.6

Participant Information: Teachers

Gender	n	%
Male	197	72
Female	77	28

Education	n	%
Bachelor	213	86
Honours	10	4
Masters	25	10

Age	n	%
21-25	8	3
26-30	32	12
31-35	55	21
36-40	60	23
41-45	47	18
46-50	22	8
51-55	25	10
56-60	12	5
60-65	2	1

Teaching Experience	n	%
less than 1 year	7	3
1-5 years	52	19
6-10	51	18
11-15	54	19
16-20	61	22
21-25	32	12
26-30	11	4
31-35	7	3
36-40	2	1

Qualification Level	n	%
Group 1	15	5
Group 2	59	22
Group 3	53	20
Group 4	143	53

Subject Areas Taught	n	%
1	104	39
2	83	31
3	51	19
4	21	8
5	6	2
6	4	1

Levels Taught	n	%
1	92	32
2+	192	68

remaining respondents received their degrees in the seventies (46%) and the eighties (21%).

The number of years of teaching experience reported by the respondents ranged from beginners (3%:7) to over 30 years (4%:9). The average number of years of classroom teaching experience was 13.6 years across all the teachers who replied to the survey. The majority (68%:192) indicated they taught courses to two or more of the basic, general, and advanced levels. However, almost a third (32%) reported teaching at only one level. The teachers reported that their teaching assignments ranged from 1 to 6 different subjects. The largest group (39%:104) reported teaching in only one subject area. Those who taught in two subject areas accounted for 31% (83). Nineteen per cent (51) reported assignments in three different subjects. The remaining 11% reported teaching assignments in 4 (8%), 5 (2%) or 6 (1%) different teaching areas.

One measure of the professional qualification of teachers is their classification in a four-group scheme established by the provincial teachers' union, the Ontario Secondary School Teachers Federation (OSSTF), and incorporated into collective agreements with the local boards of education. Five per cent (15) of the respondents were in the lowest group, Group 1, 22% (59) were in Group 2, 20% (53) were in Group 3, and 53% (143) were in the highest group, Group 4. Group 1 teachers held basic qualifications, usually a three-year degree and a basic teaching certificate. Group 4 teachers usually had obtained honours degrees and/or specialist teaching certificates in designated subject areas and some may have had a graduate degree. Salary schedules were based on differential criteria for each of the four groups, and years of experience.

4.3.3. Students

Of the 1052 students surveyed, 870 (83%) completed and returned the questionnaire. Of these, 96% (833) indicated that they were registered in Grade 12. Thirteen (1.5%) indicated that they were mature students returning for high school credit. Thirty-three students (4%) reported they were registered in Grade 11 or 13 but were taking Grade 12 courses, some of which were offered only in alternate years. Table 4.7 provides a summary of the student respondents by gender, age, program, level of study, and years in school.

The presence of mature students in the secondary classrooms is reflected in the range reported ages from 15 to 40. However, the majority of the students (96%:793) were between ages 16 and 19, and 65% (559) were 17 years of age. There were 424 males (49%) and 442 females (51%) in the student respondents.

Table 4.7

Participant Information: Students

Gender	n	%
Male	424	49
Female	442	51

Grade	n	%
11	22	3
12	833	96
13	11	1

Age	n	%
15-16	98	11
17-18	721	84
19-20	35	4
21+	13	1

Type of Program	n	%
Academic	622	77
Technical	87	11
Business	85	10
Arts	13	2

Level of Studies	n	%
Advanced	450	52
General	402	46
Basic	15	2

Years in present school	n	%
>4	73	9
4	714	82
<4	76	9

The majority of the students (77%:622) reported they were registered in academic programs. Eleven per cent (87) were in technical studies and 10% (85) in business studies. Only 2% (13) reported being registered in Arts programs. A slight majority of these Grade 12 students (52%:450) were taking their courses at the advanced level, while 46% (402) reported that their studies were at the general level. Only 2% (15) of the respondents indicated more than 50% of their work in basic level studies.

4.3.4. The Schools

As part of the survey questionnaire distributed to principals, seven questions were posed that focused on the schools. These addressed available student support services (e.g. guidance/counselling, library resources, special education), number of communities served, extent of student bussing, specialized instructional facilities available, alternative program routes offered, and interaction with the community. Based on the data generated, the following section draws an outline of the participating schools. However, it must be recognized that the sketch presented is in broad, suggestive strokes and that the fine details of variation between and among schools are lost in the percentages and means.

The general remote nature of the majority of the participating schools is reflected in the principals' responses that, on average, 47% of the students were bussed to school. The range of percentage of students bussed for the 19 principals who responded varied from 1% to 100%. The number of communities served by the respective high schools also varied from 1 to 10 with a median number of 4 (mean = 3.7). The reported distances students were bussed varied from 2 to 100 kilometers one way. On average, the principals estimated that students are bussed 48.9 kilometers (median 40 km) each way.

Regarding the allocation of full time personnel to specialized service areas such as guidance and counselling, the principals' responses indicated modest change. Seventy-seven per cent of the principals (13/17) reported that board support had remained about the same. In 1975-76, the allocation of the teaching force to guidance/counselling varied from 0.33 to 3, and in 1984-85 the allocation in this area ranged from 0.5 to 2 full-time teachers. While the minimum allocation raised slightly, the majority of principals (72% in 1975-76; 78% in 1984-85) reported 1 or more full-time teachers allocated to this area of student services. Allocation of full-time teaching staff to the library resource centre also varied across the decade. For 1975-76, 71% (10/14) reported 1 to 1.5 full-time equivalent allocation of the teaching force to this area. Others (4:29%) varied from a 0.16 to a 0.67 allocation. For 1984-85, the principals' responses indicated that 66% of the schools (10/15) set aside between 1 and 1.5 full-time teachers for this area. Thirty-three per cent (5/15) varied from 0.16 to 0.67. The majority of principals (73%:11/15) indicated board support had not changed over the decade. However, in the allocation of full-time teaching staff to work with students in special education, 88% (14/16) of the principals indicated increased board support. Where only 4 principals indicated specialized support in this area in 1975-76, 17 principals indicated allocation of support for 1984-85. This ranged from 0.25 to 3 full-time teachers. The majority of the principals (69%) allocated 1 or 2 full-time teachers to meet the special needs of their learners. The implementation of Bill 82 (legislation requiring special education services in schools) was identified as the major force in explaining this change.

Most principals (71%:15/21) reported that their schools offered all four program routes set forth in OSIS (Ontario, 1984). All included the academic program, while 90% (19/21) reported offering the business and technical alternatives. In the area of performing/visual arts, sixty-two per cent (13) reported that the program was offered, but four added that offerings were limited, or minimal.

With regard to specialized instructional space, all principals (21) reported the following facilities were available: library resource centre, science labs, computing facilities, and business education facilities. Generally these were seen to be adequate or to have improved slightly over the decade. Computer facilities were identified by all twenty-one principals as an area in which there had been a significant increase and improvement in the facilities available within these schools. Language labs were identified as a facility that were not available in 85% (17/20) of the schools. Only 15% (3) of the principals reported having such facilities. Those who had such facilities indicated there had been about the same or slightly more support for improvements. Technical shops were facilities that were reported to have received additional support over the decade by 40% (8/20) of the principals. Facilities for the performing/visual arts were reported by 70% (14/20) of the principals. Of these, 71% (10/14) indicated more support had been given to the improvement of such facilities. Generally it was noted that improved facilities were attributable to the additional funding made available through the Educap grants. More detailed discussion of the impact of this finding will be presented in the next chapter as part of the discussion of the interview findings.

The survey data indicated that regular use of community resources/facilities in conjunction with the school's program was not common. Sixty-two per cent of the principals (13/21) indicated a regular interaction with the local community while 38% (8/21) reported no such interaction. Again the data provided through the on-site interviews provided clarification of this state of affairs and is discussed in greater detail under co-operative education in Chapter 5.

4.4. Program Delivery

One of the focal tasks of the present study was to document whether and what change had occurred in the program delivery of small northern secondary schools. To do so, principals, teachers, and Grade 12 students were surveyed by a mailed questionnaire. These were followed up with on-site visits and interviews that were held with a subsample of 6 schools selected purposively from the 22 that participated in the survey. In this section, the findings from the data generated by the survey questionnaires on program delivery are reported. First the responses from the three groups of respondents (principals, teachers, and students) are examined, and this is followed by a general comparative summary.

4.4.1. Principals' Perceptions

Principals were asked to give their general perceptions about the impact of declining enrolments on programming and, more specifically, to identify the programming alternatives that had been implemented in their respective schools. Written comments on the questionnaire forms tended to focus on constraints of current concern in the local communities rather than reflecting an historical perspective of program evolution across the preceding decade. In part, this may be explained by the fact that more than half of the respondents had spent fewer than ten years in their present administrative assignments. As well, such comments reflected the tendency to be carried along in the ever changing tide of the present, and may underscore the lack of time provided for educators to reflect. The majority of the principals (65%:11/17) indicated that they viewed declining enrolments as just another problem with which they had to cope. Twenty-five per cent (4/16) reported that decline had proven a real setback. All of these had experienced a decline in enrolments of greater than 25 per cent over the decade under study. Only one principal reported that declining enrolments had proven a blessing in disguise. Ninety-five per cent (18/19) of the principals indicated that they did not view coping with declining enrolments as simply the reverse of responding to increasing enrolments. Decline was viewed by these respondents as being qualitatively as well as quantitatively different from growth.

The survey questionnaire inquired into a number of aspects of program delivery. Principals were asked to identify coping strategies used in their schools to aid program delivery, and the specific subjects in which they had been used. They were requested to comment on the effectiveness of the strategies in academic terms, in cost, and in staff morale. Principals were also asked to identify other factors (e.g. ministry requirements, funding, collective agreements) which had affected their planning and implementation of coping strategies used in their schools to aid program delivery, and the specific subjects in which they had been implemented. The findings based on our analyses of these data follow.

While all nine coping strategies included in the principal's questionnaire were identified by at least a portion of the respondents, three strategies emerged as most commonly used. These included (a) the administration and support of Ministry of Education correspondence courses (77%), (b) scheduling courses in alternate years (73%), and (c) teaching two or more courses/levels at the same time (68%). Two moderately used strategies were (a) decreased number of electives (32%) and (b) major changes in a school schedule. Strategies that were reported less frequently used included (a) co-operative education (23%), (b) independent study (23%), (c) seeking alternate students (e.g. mature students) (23%), and (d) increasing the number of required courses (18%). Table 4.8 provides a summary of these strategies with the principals' perceptions of their academic cost, and related effectiveness.

While 77% of the principals reported having their students use ministry correspondence courses, these educational leaders (83%) did not view such studies as academically effective, morale raising, or improving community relations (100%). They generally viewed the strategy as cost effective. Regarding alternate year delivery of courses, principals considered such a strategy as academically (81%) and cost (92%) effective. Perception of this strategy's effectiveness in terms of other factors was more varied and ranged from very ineffective (27%) to very effective (20%) with 53% rating it a 3 on the 5 point scale. The third commonly reported strategy was teaching two or more levels/courses together. While such a strategy was perceived as not effective academically (60%) or in other terms such as staff morale (64%), it was viewed as cost effective (73%). While about one third of the principals indicated changes to their school schedules, these tended to be negatively rated in terms of academic effectiveness (44%) and staff morale (50%).

Table 4.8

Coping Strategies Identified by Principals
and Their Perceptions of Effectiveness

	Reported Use	Effectiveness		
Strategy	%	Academic	Cost	** Other
1. Ministry correspondence courses	77	-	+	-
2. Alternate year delivery	73	+	+	*
3. Combine levels/courses	68	-	+	-
4. School schedule changes	32	-	+	-
5. Decrease number of electives	32	-	*	-
6. Alternative students	23	+	+	+
7. Independent study units	23	+	-/+	*
8. Co-op education	23	+	-/+	-/+
9. Increase required courses	18	+	+	+

KEY: On a scale of 1 (low) to 5 (high):
+ rated as 4 or 5 in effectiveness
* rated as 3
- rated as 1 or 2 in effectiveness
** Other costs included staff morale, public relations

Likewise the reduction of elective courses tended to be seen negatively from an academic (83%) and staff morale/community relations (100%) perspective. Other strategies were reported by fewer than 25% of the respondents.

In terms of planning strategies to cope with decline, principals were asked to rate the impact of four factors identified in the literature as constraining school level decision making. These included government (Ministry of Education) requirements, collective agreements, funding, and available staff expertise. Table 4.9 summarizes the principals' perceptions.

Table 4.9

Principals' Perceptions of Factors
That Have an Impact on Planning for Declining Enrolments

Factor	Effect Negative	 Neutral	 Positive
Ministry Requirements	37%	42%	21%
Collective Agreements	20	60	20
Funding	30	35	35
Staff Expertise	40	35	25

KEY: On a scale of 1 (low) to 5 (high):
+ rated as 4 or 5 in effectiveness
* rated as 3
- rated as 1 or 2 in effectiveness

From these results it appeared that these principals generally did not perceive local staff collective agreements to have a significant impact on their planning to cope with declining enrolments. A somewhat negative impact of ministry requirements and available staff expertise was noted. The perceptions of the issue of funding were quite evenly divided across the respondents.

Two factors that were perceived to have a somewhat positive effect on implementation of strategies to cope with declining enrolments were staff attitude (94%) and board attitude (37%). The two most negative factors were unexpected developments such as more time required, late delivery of equipment, funding (50%), and planning misjudgments (44%). Community attitude was reported to have little or no effect (73%), as were resignations and/or illnesses (65%).

Two recommendations from the Allan Report (Allan, 1983) that had implications for program delivery were the recommendations regarding the establishment of program councils and additional targeted funding. Principals' perceptions of the impact of the implementation of these recommendations were also requested. Since program councils were found only in northwestern Ontario, most comments came from principals in that region. One principal from outside the region reported involvement with the project and indicated a very positive endorsement for that experience. Positive comments were related most often to the direct participation in the production of relevant (basic level) curricular documents, and to the immediate positive impact on the school programs as these documents were field tested and implemented in these schools.

Comments on the Educap funding program were consistently positive. Principals reported that the monies were used for much needed renewal in technical shop equipment, updated equipment for business studies and family studies. These funds also provided the opportunity to acquire new equipment in the area of computer education and for education in the performing arts (music and theatre improvements). Throughout the comments ran a recurring theme that there was a continuing need for targeted funding for the small northern secondary school, and the stated concern that the advances achieved would be lost quickly as specialized equipment required continuing maintenance and renewal. The additions made possible through this special funding were seen as enriching the program opportunities the schools could provide.

4.4.2. Teachers' Perceptions

The teachers surveyed were requested to identify strategies they knew had been used in their schools for coping with decline and to rate the academic effectivenes of those in which they had been involved. The three major coping strategies identified by the teachers were (1) multi-level classes (67%), (2) alternate year course delivery (48%) and (3) multi-departmental teaching assignments (43%). Significantly fewer teachers reported (1) school schedule changes (29%), multiple subject classes (20%), and teaching in conjunction with independent learning packages such as correspondence courses (12%). Table 4.10 provides a summary of the teachers' perceptions of these strategies.

Table 4.10

Coping Strategies Identified by Teachers
and Their Perceptions of Effectiveness

Strategy	Reported Use	Academic Effectiveness		
		-	*	+
Multilevel classes	67%	58%	31%	11%
Alternate year delivery	48	38	34	28
Multiple department teaching	43	29	41	30
School schedule changes	29	25	19	56
Multisubject classes	20	74	13	13
Ministry correspondence courses	12	36	37	27
Co-op education	9	48	0	52

KEY: On a scale of 1 (low) to 5 (high):
+ rated as 4 or 5 in effectiveness
* rated as 3
- rated as 1 or 2 in effectiveness

Secondary classroom teachers did not rate multisubject or multilevel classes as academically effective teaching situations. A majority of the teachers who responded reported that the changes to their school schedules were effective ways of coping with changes due to fewer students. Teaching in more than two departments is generally viewed as a positive alternative by the teachers who reported they did so.

The results appeared to indicate that secondary classroom teachers viewed their co-operative education experiences either as very effective or very ineffective. There was not much middle ground.

When asked to identify subjects in which they had experienced significant decline in student enrolments over the decade from 1975-84, secondary teachers identified several areas of decline. The five major areas were (1) family studies, (2) history, (3) geography, (4) business studies, and (5) technical studies. Analyses of the subject enrolments from the September reports verified decline in the first three of these areas.

Fifty-nine per cent (133/244) of the teachers indicated that there had not been significant additions of courses and sixty per cent (136/228) said there had not been significant deletions. These results suggested fairly stable offerings in major programs. The secondary teachers identified changes in ministry diploma requirements as the most significant force for adding courses (24%:67/284) to the school program, and they identify declining enrolments as the leading reason for dropping courses (23%:64/220) from their schools' programs.

When asked to rate the effect of factors on implementing strategies to cope with declining enrolments, classroom teachers identified board and staff attitudes as forces that have a positive influence. Unexpected developments and planning errors or deficiencies were rated as having a negative impact. Table 4.11 summarizes the teachers' ratings for these factors.

Table 4.11

Teachers' Perceptions of Factors
That Affect Coping Strategies

	Effect		
Factor	-	*	+
Board attitude	17%	41%	42%
Staff attitude	30	22	48
Unexpected developments	46	51	3
Planning errors	57	35	8

KEY: On a scale of 1 (low) to 5 (high):
+ rated as 4 or 5 in effectiveness
* rated as 3
- rated as 1 or 2 in effectiveness

4.4.3. Student Perceptions

To provide a more comprehensive view of program delivery in small northern secondary schools, the Grade 12 students of the participating schools were surveyed to determine their perceptions of the benefit of their secondary school programs in terms of their vocational and academic plans. As well as program benefit, student perceptions of course benefit were also sought. More specifically, as with the principals and teachers, the students were asked to identify the changes they had noted in the delivery of their programs and to rate their perceptions of the strategies they identified. Findings based on the student survey generated data are reported in the following sections.

As reported in section 4.3 of this chapter, just over three-quarters of the student respondents (77%) indicated they were enrolled in an academic program. Business and technical studies accounted for 21% and the remaining 2% reported programs in the Arts. The majority of these students reported that their work was at the advanced (52%) or general (46%) levels. Only 2% reported that more than half of their course work had been at the basic level.

Student perceptions of program benefit for vocational and academic plans generally indicated some degree of satisfaction. Regarding their vocational plans 76% (638) of the respondents rated their programs as of benefit. Eighteen per cent (149) rated the benefit as great. For their academic plans, 85% (718) of the students rated their programs as having great (26%:223) or some (59%:495) benefit. Table 4.12 summarizes the students' perceptions of the benefit of their programs to their vocational and academic plans.

When students' ratings of program benefit to their personal vocational and academic plans were collapsed to generate a positive (some/great) and negative (little/none) rating by program it became clearer where the variations of student perceptions were located. Table 4.13 presents student ratings of benefit of secondary programs to vocational and academic plans by program.

In most programs a significantly greater number of students rated their studies as having a positive benefit to both vocational and academic plans with the exception of students registered in Arts programs. These respondents

Table 4.12

Student Ratings for Benefit of Program to Vocational and Academic Plans

Plans (n respondents)	Benefit of Program great % (n)	 some % (n)	 little % (n)	 none % (n)
Vocational (837)	18 (149)	58 (489)	19 (158)	5 (41)
Academic (846)	26 (223)	59 (495)	12 (100)	3 (28)

Table 4.13

Student Rating for Benefits of Programs to Vocational and Academic Plans by Program

Program (respondents)	Plans Vocational Academic	Ratings Positive % (n)	 Negative % (n)
Academic			
(600)	V	77 (460)	23 (140)
(607)	A	87 (529)	13 (78)
Technical			
(85)	V	75 (64)	25 (21)
(84)	A	73 (61)	23 (27)
Business			
(81)	V	80 (65)	20 (16)
(83)	A	81 (67)	19 (16)
Arts			
(12)	V	58 (7)	42 (5)
(13)	A	77 (10)	23 (3)

did not view the benefit of their secondary studies as positively with regard to their vocational plans. Students in academic programs tended to rate their studies as having greater benefit for their academic plans than did students in technical studies or the Arts. Students registered in business programs rated their programs positively for both their vocational and academic plans. When student responses were analysed by level of studies, a somewhat more stable picture emerged. Table 4.14 presents the findings generated from the analyses of students' perceptions of program benefits by level of studies.

Consistently, students from all three levels of studies reported a positive perception of their secondary programs for both vocational and academic plans. For all three levels, a higher percentage (7%-12%) of students indicated a positive benefit of their studies for their academic plans than for their vocational plans. Even the basic level students viewed their studies as more positive for their academic plans than for their vocational plans.

Table 4.14

Student Ratings for Benefit of Programs to Vocational and Academic Plans, by Level of Studies

	Plans	Ratings	
Level of Studies (respondents)	Vocational Academic	Positive % (n)	Negative % (n)
Basic			
(15)	V	67 (10)	33 (5)
(14)	A	79 (11)	21 (3)
General			
(396)	V	73 (274)	27 (103)
(374)	A	80 (308)	20 (78)
Advanced			
(449)	V	79 (351)	21 (91)
(424)	A	89 (396)	11 (47)

As with the principals and teachers, the Grade 12 students were asked to identify changes in program delivery and to rate their perceptions of the effectiveness of the strategies they identified. Table 4.15 summarizes the student responses to this part of the questionnaire.

A study of the table reveals five strategies that are commonly identified by the students. These were (1) correspondence courses, (2) multilevel classes, (3) alternate year course delivery, (4) inclusion of mature students, and (5) computer assisted/managed instruction. Less commonly reported experiences included technologically enhanced course delivery, multiple course classes, and co-operative education. Involvement in classes in a multicampus setting was reported by a few (3%) students as were evening courses (2%). Each of these was identified by students from a specific school.

Table 4.15

Coping Strategies Identified by Students
and Their Perceptions of Effectiveness

Strategy	Reported Use	Academic Effectiveness		
		-	*	+
Ministry correspondence courses	64%	9%	21%	70%
Multilevel classes	59	38	29	33
Alternate year delivery	57	33	41	36
Inclusion of mature students	45	16	21	63
Computer assisted/managed courses	40	14	31	55
Technologically enhanced delivery	15	15	26	59
Multiple Course Classes	14	45	28	27
Co-op education	14	14	17	69

KEY: On a scale of 1 (low) to 5 (high):
+ rated as 4 or 5 in effectiveness
* rated as 3
- rated as 1 or 2 in effectiveness

Of the five major strategies identified by the students, the respondents generally viewed correspondence education, the inclusion of mature students, and computer assisted/managed instruction as positive strategies. Multilevel classes and alternate year course delivery received a more mixed reaction from the students. Multilevel classes received the greatest number of negative ratings. Alternate year delivery, while accepted by the majority (79%) did receive a notably negative rating (35%) as well.

For the less commonly reported strategies, technologically enhanced course delivery and co-operative education were both positively rated by those who identified such alternatives. Multiple course classes received a more negative rating.

Students were also asked to indicate their perceptions of the level of education needed in their respective communities. In their responses, most of the students (94%:787) indicated that secondary education or higher was needed in their northern communities. Fifty-two per cent (432) indicated that secondary schooling was adequate; 35% (295) of students reported that a community college education would be needed, and 7% (60) of the respondents thought a university level education was needed. Only 6% (49) of the respondents indicated that elementary or no formal education was sufficient for living in Northern Ontario. When asked what their plans were upon leaving high school, sixty-seven per cent of the students stated they planned to continue their studies. Of these, 39% (337) listed community college programs and 28% (237) listed university studies. Eight per cent of the students planned to combine continuing education/training with work either through apprenticeships (4%:36) or programs with the armed forces (4%:36). Entry to the work force was indicated by 13% (113), and 8% (68) were undecided, while 4% (34) indicated they had other plans, which included travel, marriage, and continuing employment for a number of mature students.

4.5. Summary

Findings from the survey phase of the study have been presented in this chapter, providing an overview of the perceptions held by principals, teachers, and Grade 12 students on program delivery in small secondary schools. From the responses of the three groups a consistent picture has emerged with regard to what alternative coping strategies were employed in the delivery of secondary school programs across the northern part of the province. A sense of the degree to which these strategies are used has been obtained. However, variations in the perceptions of the three groups with regard to the effectiveness of the respective strategies also have been noted and have underscored the complex and dynamic nature of program delivery and the need to complement principals' perceptions not only with those of teachers but also the students if we are to more fully understand program delivery in the small secondary school.

Major coping strategies identified by all three groups of subjects included the administration of Ministry of Education correspondence courses, multilevel classes, alternate year course delivery, and modifications to the daily, weekly or annual school schedule. Perceptions about the academic effectiveness of such strategies varied across the three groups. In the case of correspondence courses, principals tended to view this alternative as not academically effective. Teachers gave mixed ratings, and students tended to rate the strategy quite positively. While principals and teachers viewed multilevel classes as necessary to meet the needs of lower numbers of students, they did not rate such instructional situations as academically effective. Students gave mixed ratings based on their experiences. Alternate year course delivery was rated quite positively by the principals, while teachers and students gave mixed ratings to the academic effectiveness of such arrangements. Although modifications to school schedules varied from school to school, these were perceived generally as being academically effective by those respondents who commented on the strategy. The inclusion of mature learners returning to upgrade their education was also viewed as a positive and effective alternative for increasing student numbers.

Less frequently reported alternatives included co-operative education, technologically enhanced course delivery including computer assisted instruction, and school based independent study units. Each received somewhat mixed ratings in terms of academic effectiveness across the three groups of respondents. These variations in the rankings and ratings of the alternative coping strategies provided a basis for developing the guides used in the on-site visits and interviews in the sub-sample of six purposively selected schools. Analyses of the qualitative data and findings generated from these visits are the topic of the next chapter.

Regarding the implementation of recommendations from the Allan Report, all principals indicated the Educap grants came at a time of critical need for renewal. Some of these funds were used to provide equipment and facilities that otherwise would not have been available. Since this was a limited term recommendation, there was genuine concern that in a few years schools would find themselves in dire straits once again. Teacher opinion reflected the degree of involvement they had had in either renewal or expansion, with concern about future renewal expressed by the former and satisfaction with new opportunities by the latter.

Another major consequence of the Allan Report was the introduction of two program councils, consortia of schools boards for curriculum development. The program councils were viewed very positively by the small, remote secondary schools in northwestern Ontario. Concerns about time away from class and travel costs were raised by both principals and teachers. Interviews were held with both of the co-ordinators to provide details of the operations of these two councils. These too are discussed in the next chapter.

Chapter 5

Findings From the Interviews

5.1. Introduction

Findings on strategies used to cope with program delivery in the face of declining enrolments have been presented in previous chapters of this report based on a review of the literature (Chapter 2), visits to the prairie provinces (Chapter 3), and a mailed survey questionnaire to 22 small Northern Ontario secondary schools (Chapter 4). Each of these phases of the study had an influence in shaping the on-site visits to the subsample of six schools drawn purposively from the survey population of 22 schools. Four of these schools were from northwestern Ontario with one representative from each of the midnorthern and northeastern regions. A more detailed account of this phase of the study was been provided in section 1.3.2.2. of Chapter 1. This chapter documents the on-site interview findings. Also included in this chapter is information gathered from interviews with representatives of the Independent Learning Centre, the program council co-ordinators, directors of education for boards from which two of the six schools were drawn, and three officials from the northwestern regional Ministry of Education's office. These qualitative data helped to clarify findings from the survey phase of the study and added insights on coping with decline at a school level.

In presenting the findings from this interview phase, the chapter is organized according to the three categories of coping strategies identified by Bussard and Green (1981). In order of presentation, the first section focuses on coping strategies that use within school system resources, the second on between system coping strategies, and the final section on the use of resources from outside the school systems. A brief summary concludes the chapter.

5.2. Within School System Strategies

Coping strategies from this category that were identified from the literature and questionnaire survey phase included staffing alternatives, self study courses, mixed classes, and modified school scheduling. Principals, teachers, and students were invited to share their experiences and opinions on each of these, and the following account attempts to synthesize the perceptions they provided.

5.2.1. Staffing

Interview data clearly supported the survey questionnaire confirmation of the Ontario tradition of secondary teachers with specialized teaching credentials. The entry prerequisites of major and minor teachable subjects continue to be the norm reported by practising teachers. In those schools hit by severe decline, two subject specializations have proven insufficient to deliver the full secondary programs, and the survey data had indicated that at least 30% of the teachers who responded to the survey had teaching assignments in more than two areas. Interviews helped to clarify the use of teachers outside their certificated subject areas as a strategy for coping with declining student enrolment.

Both principals and teachers were questioned on the relative merits of teachers with generalist or specialist backgrounds to determine the levels, divisions, and subject areas where flexible staffing patterns were deemed to be appropriate. From the interviews we found both school administrators (principals and vice-principals) and teachers indicated that teaching staff with specialized content background and general teaching expertise were required. As one teacher observed, "you want a mix -- both specialists and generalists. Without specialists, kids would be denied equal opportunity, especially in mathematics and science." Another noted that "the need for theoretical background" in the senior grades and at the advanced levels necessitated "teachers with strong math backgrounds". This was particularly stressed by teachers who were responsible for Ontario Academic Credit (formerly Grade 13) courses for students preparing for university entrance. Administrators expressed a preference for "specialists who can become generalists". One principal advised that in hiring he would try to "get a specialist, if at all possible", but hastened to add that he would look for "one who's interested in adolescents and has a professional attitude." A vice-principal noted that his hiring policy was to look "first for a teacher, then for a specialist." Another administrator noted that "to fully exploit your professional staff, you need generalists, but for disciplinary leadership, you need specialists."

Teachers' responses, based on their own personal experiences in teaching within and beyond their certificated areas of specialization, regularly documented the need for flexibility in teaching assignments but raised concerns regarding those who were assigned to teach in areas where they had no academic background. However, if such were to be the case it was generally agreed that such assignments were most appropriate in the intermediate division (Grades 9 and 10) and at the basic or general levels. One teacher observed, "Thrown into it, I became aware I could teach anything. The general assignments are mostly at the Grades 9 and 10 and at the basic or general levels."

Teachers noted both positive and negative effects of teaching outside their areas of training. On the negative side, they noted the potential erosion or "loss of expertise" that came with not teaching in their areas of academic strength but spending time preparing courses and themselves to become a "generalist teacher" in other areas. This concern was linked to the number of course preparations required outside one's areas of specialization, and to the impact of such assignments when extended over several years. Some expressed a "personal loss" in terms of time and finances expended during their preparatory years of specialization, and the frustration of not being able to use to the fullest the expertise that they had developed.

On the positive side, teachers noted that teaching assignments outside their original areas of certification provided a personal challenge and opportunities for professional growth. The following comment from a teacher who moved out of her area of specialization in the senior division to teach other subjects at the intermediate level illustrates such feelings: "After the initial shock, I really enjoyed junior level courses. I learned a lot and will do it again. It presented a personal challenge but gave me a sense of accomplishment."

In summary, the interviews with teachers and principals generated a fair degree of consensus. The small secondary school needs a balanced blend of generalist and specialist teachers. While administrators expressed a need for "generalists" since such staff members provided the principal with the greatest degree of flexibility, it became very clear that their responses should not be construed as being "less qualified" academically, or as one principal stated, we don't need "elementary teachers in high school". However, a solid general teaching ability combined with a genuine interest in and sensitivity toward all secondary students irrespective of level of ability, division of studies, or program were cited frequently as necessary prerequisites for either the teacher who had specialized or the generalist who had an inclination to teach in smaller, more isolated secondary schools.

5.2.2. Self Study

According to the Ontario Ministry of Education (Ontario, 1984:30), self study alternatives to regular classroom delivery of courses include: (1) independent study, which is school based, under the direction of a teacher and involves independent study for components or up to the 110 hours of scheduled time for a full course; (2) private study, courses "for which attendance at the school is not required" but the school is "willing to monitor the student's progress"; (3) correspondence education, "courses conferring credit towards the OSSD" [Ontario Secondary School Diploma] and "provided by the Ministry of Education through the Independent Learning Centre". Of the three, only the first, independent study, is a within school system strategy, and will be discussed in this section. The latter two are outside system alternatives. No examples of private study were described in the interviews. Correspondence education will be examined in some detail later in section 5.4.1.

Based on comments from the principals, teachers, and students, one must conclude that school-based independent study is a rare occurrence. In some instances correspondence courses are purchased from the Independent Learning Centre and used as the foundation for such studies. Such studies were described by a number of teachers as "a last resort". There was a general sense that such learning experiences tended to be of inferior quality to regular classroom instruction.

One illustrative example was shared by a principal who described in some detail how the English department head had designed, monitored, and evaluated an advanced Grade 11 English course. This alternative was offered for only one year. When the individual moved on to a new teaching assignment in another school system, a new department head was appointed who "did not believe in such studies". As a consequence, the independent study course was dropped from the program. The principal noted that the offering of such courses depended, in large extent, on having teachers who "believed in such an apprcach" and were "prepared to do the extra work" in preparation, monitoring, and evaluation. In another school, an advanced Grade 13 history course was offered through an independent study mode. However, it was organized in conjunction with a Grade 12 general level geography course. According to the students, the history portion was conducted in the library where the teacher met with the students for a few minutes at the beginning of each class to give assignments, review progress, and recommend resources for assignments. Then students were left to work on their own. Student comments indicated that the work could be done at home, so there was a tendency "to slack off" during the unsupervised work period.

Student interest and motivation to undertake such studies were noted as critical by the teachers. Well developed independent work habits and adequate support systems (facilities and appropriate resources) were also identified as key ingredients. Students too indicated their awareness of the importance of these factors. One student summed up her perceptions of independent school-based studies in these words:

> You've got to do it on your own. Only when you go in and ask will they tell you about it, since they know then that you are really interested.

Comments from principals and teachers in about fifty per cent of the schools indicated independent school-based studies were available at a very minimal level. However, the interview data for the remaining schools revealed no teachers or students involved in such studies.

5.2.3. Mixed Classes

As student enrolments declined it became increasingly more difficult for small secondary schools to offer the regular course offerings to more or less homogeneous classes. As revealed by the survey data, all six schools offered mixed classes. It became very clear from the interview comments that the mixed classes were most commonly mixed levels (general/advanced or basic/general students in the same classroom). Much less frequently noted were multiple courses offered in a single classroom at the same time. Courses that were offered in alternate years regularly included students from two or three different grades. However, all students took the same course at a designated grade level. For example, students from Grades 10, 11, and 12 enrolled in a Grade 11 Man in Society course which was offered on an alternate year basis to students in all three grades at the Grade 11 level. Across the comments from all three cohorts came a common refrain that such classes, while not academically the most desirable, were necessary if students were to complete their diploma requirements without undue delay.

Teacher comments on mixed level classes varied in terms of which levels were most appropriately combined. Some advocated combining general and advanced level students, while others indicated that a basic/general combination was preferred. Generally teachers indicated that the basic and advanced levels tended to be more homogeneous in nature, whereas, the general level was viewed as having the greatest student variation in terms of ability, interest, and work/study skill, and as the most challenging to teach.

Comments during the interviews with students, teachers, principals, and regional ministry officials revealed that multilevel teaching tended to be whole class teaching with differences between levels being expressed in terms of assignments. Students generally perceived the difference to be more work in the more advanced level. One student stated, "When we write our tests, the advanced students have to answer one or two extra questions. That's the only difference. We do the same work in class. Some kids just don't do as good."

While many teachers confirmed that their major differentiation of levels of students in mixed classes was in terms of expectation and evaluation methods, some teachers indicated that they differentiated the classroom instruction and resources. Such attempts were met with mixed reactions from students. One advanced level student observed, "We always have to wait for him, while he deals with the four year class members." Another noted that successful combinations of levels "depends on the teacher; whether or not they've worked out a system. One day you got attention; the other day not." While the observations may reflect a somewhat negative perception, a third student noted, "If you have a few students in the five year class it's okay; if it's half and half, it's harder. Possibly each group should get attention on alternate days."

While principals viewed mixed level classes as operational realities, their sentiments were summed up by one administrator who observed, "Such organizations are expedient; not necessarily educationally good." Principals were aware of the tendency toward whole class teaching with variation only in evaluation strategies as reflected in the following administrator's comment:

> Academically, avoid it, since there's a tendency to teach in the middle. The only differentiation is in evaluation.

One of the regional ministry officials interviewed expressed considerable concern about high scorers (those receiving marks over 80) receiving advanced credit, while students with middle grades (in the 60's and 70's) received a general credit for the course. Marks in the fifties were classified as basic. The officer labelled this "the thermometer approach" and indicated that such was not in accordance with stated ministry policy. Although the Ministry of Education (Ontario, 1984 [OSIS]) did suggest that "in all combined classes, the courses should be planned to utilize classroom resources most effectively, recognizing the need for a balance in teacher-instruction time, independent study by the student, project work, and other assignments" (see 5.5:22), the major policy emphasis was on "course objectives and evaluation procedures for each level of difficulty". In the OSIS document (Ontario, 1984), the ministry stated that these expectations and requirements "must be articulated clearly so that students, parents, and teachers are aware of the credit requirements for each level". Little or no guidance was provided for the secondary teacher in terms of alternative classroom instructional strategies when working with multiple groups. This appears to need attention since the historical tradition of secondary education in the province has been self-contained, whole class instruction. One teacher noted this need, when he pointed out that "one has to go beyond the differentiated evaluation of the seventies;

teaching itself needs to be substantially and significantly different." Comments from the classroom teachers tended to suggest they had received little professional preparation either in their preservice teacher education (mainly from the sixties and seventies) or in-service professional development activities in classroom teaching. There were some comments that those teachers who had experience in elementary schools and had transferred to a secondary school teaching assignment experienced more success with teaching mixed level classes. However, there was again a concern expressed that education at the secondary level was different from, and more than a mere extension of, elementary level teaching.

While teachers generally expressed a preference for multilevel over multigrade or multisubject classrooms, one Ministry of Education official expressed somewhat different views. He suggested that

> mixing grades would be easier than mixing levels since it is more clearly distinct, in that the former presents different sets of programs. One might perceive that mixing different levels is easier, but may do more damage to the kids when the same program is taught. Different grades and courses are more black and white than different levels.

Principals consistently expressed negative perceptions of multisubject as well as of multigrade classes. Teachers' comments suggested that such combinations were dependent in part on the nature of the subject. Three areas in which multigrade, multisubject classes were identified were family studies, industrial arts/technical studies, and physical and health education. The following comments illustrate the contrasting viewpoints expressed by teachers in such settings.

First, a family studies teacher observed that her experiences with a Grade 10 to 12 combination "was a terrible experience". Lack of room dividers was considered a contributing factor to this negative impression. As well, as problems in physical distances between and among groups, the teacher also noted that the students were "too far apart in maturity". She found herself torn between attending to the needs of the Grade 12's who were more prepared to deal with generalizations and issues and those of the Grade 10's who were busily "involved in hands on activities" that also required her attention. In contrast, a teacher in industrial arts in the same school noted that a Grade 10 to 12 combination "worked out well, since the facility shifted into three blocks going on simultaneously." He hastened to add, "It's hard to imagine doing that in an ordinary classroom."

In another school, a technical studies teacher reported instructing four or five small groups at the same time, working with basic or general level students in beginning or advanced courses in gas welding, arc welding, and advanced welding. The size of the groups varied from two students to five for a total of sixteen students. For each course a syllabus with a set of course assignments was handed out at the beginning of the term. Lessons on shop safety were taught to all students combined. Other whole class lessons were given only when a common theoretical point could be presented to all groups. The instructor said he had come from industry and supervising a number of people in different projects was part of that real world. This technical studies teacher stressed the need for firm guidelines and consistent daily applications to make such a classroom work. However, he did raise concern for safety supervision. Other teachers who were involved in similar teaching contexts echoed this concern. While there were limitations in the facilities, he stressed that this was the only way the school could provide access to such studies. This classroom exhibited a multilevel, -grade, -subject arrangement that was not commonly found in the other schools. In this teacher's view, "OSIS has devastated the technical studies program" at the senior level.

In physical education, where the interviewees described an increase in the number of co-education classes, combined grades were also identified. One teacher in this subject area reported "no difficulty" in handling a Grade 11/12 physical and health education class. However, he thought that combining different grades in biology or computers would not work as smoothly, since "the kids had to be left on their own before they were ready".

Underlying the comments shared by principals, teachers, and students in the interviews was the general opinion that multilevel classes were superior to independent study or correspondence courses. While a few teachers discussed advantages in mixed level classes, which included "different levels of students sharing ideas", becoming sensitive to others' abilities and needs, and providing help to each other, several teachers warned against "labelling students according to ability". In their opinion, while good work habits and study skills could compensate for a lesser ability, the reverse did not follow.

Interviews with principals, teachers, and students clearly established that (1) multi-level classrooms were found in all schools, (2) multigrade classes were taught at one grade level, and (3) multisubject classes were found infrequently. Most commonly the multisubject classes were in the technical studies area. All interviewees expressed some concern about the quality of instruction in such courses. Generally, principals and teachers expressed a need to know how to improve classroom instruction under such circumstances. There is a need for both preservice and in-service teacher education to address instructional issues in multiclass settings.

5.2.4. Modified Scheduling

Across the six schools visited a variety of schedules were observed. These included fully semestered schools (50%), a modified semester system of half courses offered in a five day cycle, and a non-semestered four day teaching cycle of fifty minute periods. Questions to the principals revealed that each viewed the local schedule as the best for the school. Those principals, teachers, and students who had semestered school offerings noted the following strengths: (1) it allowed students to concentrate on fewer subjects; (2) teachers had fewer preparations; (3) longer class periods allowed for the variety of learning experiences (class instruction, group projects, independent study recommended by OSIS (Ontario, 1984); (4) it provided a total renewal for both teachers and students at the end of January when such was most needed; (5) teachers are responsible for fewer students each semester; and (6) longer class periods were available for courses that require hands-on activities (e.g. family studies, technical studies, visual arts). Weaknesses identified with semestering included: (1) extended breaks in the continuity of student involvement in subjects such as mathematics or English; (2) periods were too long in duration for attention span of many general/basic level students; (3) inefficient use of longer periods of class time (e.g. less content covered; fewer skills taught); (4) extended student study periods may result in wasted time; and (5) a greater negative impact on students who were absent for extended periods of time. Educators tended to be either very supportive or very sceptical of the merits of semestering. A general concern expressed by principals, teachers, and students focused on the ease with which schedules could accommodate students who move from one school to another during the academic year. That was a continuing concern in resource-based communities, where a significant portion of a community is fairly mobile.

A second scheduling alternative reported by all six schools was alternate year course offerings. Such scheduling was found primarily in the senior division. Administratively this strategy increased the student pool and so made senior level course offerings more viable. Principals, teachers, and students saw this alternative allowing the continuation of more specialized courses, which may be required for entrance to university programs. Physics and chemistry were cited as examples from the sciences. Teachers reported that such scheduling allowed them to teach in their areas of expertise at least in alternate years. As noted earlier, teachers expressed concern about "getting out of touch" or "becoming stale" in their subject specializations when required to teach in other areas. Alternate year scheduling kept them "in touch", albeit not as frequently for some such as those in senior history, geography, or family studies might want.

While this strategy was deemed by principals, teachers, and students to be essential, it had certain disadvantages. Both teachers and students noted that students "can get caught" needing a senior level course that was not being offered in the student's graduating year. Such instances often resulted in the need for correspondence study if the student were to meet diploma requirements. Long range planning by principals, teachers, and students was seen as essential by all three groups. Students expressed concern that they were not kept informed sufficiently, while principals suggested that students did not always pay careful attention to information provided to them. Students said that alternate year scheduling might conflict with other required courses in the daily schedule. To some degree there was the suggestion from student comments and teacher observations that alternate year course delivery could limit changing career options in the senior division. While students might meet diploma requirements, one teacher recalled instances when the students did not have the prerequisites for a specific university program and so had to select an alternative from which the student withdrew before completing the requirements. Students recounted stories of others who had to return for one course to complete diploma requirements. Principals in semestered schools reported that they were able to couple alternate year with alternate semester offerings and in this way alleviate some problems in terms of the length of time a student must spend to complete a course.

The relative merits and demerits of alternate semestering evoked rather strong and divergent responses. Concerns were raised by both teachers and students about instances where two semesters could pass before a course was offered again. One principal noted:

> Schools like this have no alternative but to semester. It allows stacking of classes such as two French courses — Grades 9 and 10 — in one year which is imperative to meet enrolment requirements.

This principal noted that by combining alternate year courses and alternate semestering it was possible to offer thirteen Grade 13 (OAC) subjects in a given year. Teachers said that while daily review might be less needed in semestered classes, there was a greater need for extended review if two semesters passed before a student continued studies in mathematics for example. Another principal was adamant that semestering was advantageous only for advanced level students planning for university. Since fewer than 6% of his student body went on to such studies he saw "no advantage in changing to semestering".

According to one regional Ministry of Education official, "time is a flexible resource", which presents plenty of scope for creative ways to meet unique needs of students and staff. In his opinion, this resource was one with which "much more could be done than has occurred so far". Principals' comments suggested the task was much more complex and constrained by factors such as student interests in courses, adaptability of staff, and availability of teachers with expertise needed to offer senior level courses.

In summary, administrators believed that the current school schedules met the needs of their students. Opinions on semestering varied among the principals, teachers, and students, and within the teacher group depending on the subject(s) taught. Alternative year scheduling of courses was a reality in these small schools, particularly in the senior division. Principals generally saw this scheduling strategy as a viable and commendable option. Opinions among the teachers varied, depending upon whether their teaching subjects were involved. Most saw this as a way to ensure specialized courses survived. Students generally did not view this strategy very positively. A number of students commented on "being caught" in the year the course that they needed was not offered. Students also noted that alternate year delivery of courses generated multigrade courses in which junior students complained of teachers practising assumptive teaching. Teachers were perceived to assume all students in the class had the requisite backgrounds and skills to work at the higher level. Such students saw themselves as disadvantaged when their work was compared with older students who had the required background.

Within school system options were the most noticeable group of alternative coping strategies observed in the participating schools.

5.3. Between School Systems Strategies

According to Bussard and Green (1981) these strategies involved options in which two or more school districts co-operated to cope with declining enrolments. As noted in Chapter 2 (Section 2.3.), such alternatives may bring together students from a number of jurisdictions, sharing teachers and/or administrators, sharing support staff, or providing specialized portable instructional facilities. From the survey data and the on-site visits, examples of formal co-operation among school systems were quite limited.

One example of interboard sharing is the two regional curriculum councils established in northwestern Ontario. In operating these enterprises, part of the operating budgets come from contributions from the participating boards. However, the major financial outlay, the co-ordinators' salaries and major travel expenditures were covered by funding from the regional office of the Ministry of Education through special funding made available by the government on the advice of the Allan Report (Allan, 1983). As well, from interviews with the co-ordinators, and regional ministry personnel, we concluded that the major impetus for these councils came from the regional office level. Based on the above comments we recognized some overlap with the "between systems" and "outside systems" categories set forth by Bussard and Green. However, we have chosen to describe these regional consortia under the category of outside the system strategies. A director of education from one of the more isolated communities provided an example of between system resource sharing. In this instance the public and separate school systems co-operatively approached local family services and health agencies to acquire the services of a speech therapist who was available not only to the elementary but also to the secondary school systems. These two boards also co-operatively hired a liaison teacher to work with exceptional students in each of the two jurisdictions.

Most of the six schools were geographically removed from other secondary schools. This tended to militate against between system sharing. There was only one instance of sharing between two campuses. Comments from the principal, teachers, and students of this two-campus school will be discussed, and less formal sharings that arose in the participants' interviews such as the interschool athletics programs and regional professional development activities are described in the following sections.

The administrative amalgamation of two schools about 15 km apart was a response to declining enrolments in both schools. Great resistance in one of the communities to the initial decision to close its high school led to the alternative of keeping both schools open and integrating the administration and programs. Some courses were taught in one or other of the schools and students and staff were moved between schools. Generally, students who worked in both schools would work a half day in each school.

While the two-campus arrangement served to keep the one school open and had administrative and program advantages, the students in particular found the travel back and forth, long waits for transportation, and the general dislocation less than satisfactory. There were some signs in the later stages of this study that the two schools would be returning to independent administrations. The strong political desire to maintain a school in a community at almost any cost was apparent.

Possibly one of the oldest and most consistent forms of interschool co-operation is the co-curricular athletic program in which many schools participate, albeit a limited number of students and teachers. Such co-operation in one particular specialty has potential for important spin-offs for other aspects of the school program. For example, the physical education teachers involved and the team coaches reported teaching in other subject areas. Within the formal structure of interschool athletics, these teachers indicated there were informal opportunities for the exchange of teaching ideas and resources. This type of informal co-operation may occur at the level of the classroom teacher, the department head, or the principal. For example, one physical and health education teacher noted that isolation was a critical factor in his professional development, and stated, "I'm lucky in that I meet with other department heads in this region three times a year to plan the yearly extramural schedule." He went on to indicate that such occasions provided valuable opportunities for informal discussion of other professional issues.

In addition, professional meetings by subject area in the region or at the provincial level provided opportunities for informal exchange as well. Another teacher from family studies stressed the importance of such meetings in the following comments: "They're [the meetings] a must for teachers. For the last couple of years I got release time, but went to southern Ontario at my own expense. One needs a full day on a specific subject with a fixed agenda and a knowledgeable resource person." Another teacher observed that "years ago we had P.D. for the whole district. It was good to swap and share ideas with teachers in your subject area. Although people say P.D. is a waste of time, meeting with people in your own subject area is always useful and beneficial." Another teacher in science noted that he appreciated such district meetings for the opportunity they provided for sharing "tricks of the trade" for making chemistry teaching relevant to students in the classroom. For the teacher in the small secondary schools such meetings help to compensate for the lack of support provided by departmental colleagues found in larger school settings.

As noted in the introduction, formal between school system strategies were very limited. There was only one instance of multicampus co-operation. No mobile vans with specialized teaching facilities were identified. The isolated reality of the majority (4/6) of the six schools may account for the lack of shared teaching and administrative staff. Amalgamation of Grade 7 and 8 students was illustrated in one instance and provided opportunities for exchanging teaching expertise across the full intermediate division in both directions, from the elementary panel up to Grade 10 and from the senior division down to Grade 7.

5.4. Outside School System Coping Strategies

Alternative strategies included in this category by Bussard and Green (1981) involved schools going beyond their systems and other school systems to seek supportive partnerships to deliver quality programming. From the survey data three major outside system strategies were identified. These included correspondence education, co-operative education, and program councils. Principals', teachers', and students' perceptions of these alternatives were sought during the on-site interviews and are discussed in the following sections.

5.4.1. Correspondence Education

As noted in the analysis of the survey questionnaire data, discrepancies were noted between principals' reported use and perceived effectiveness of correspondence education as a coping strategy. As well, students and principals appeared to differ significantly in their views of this alternative. As part of the on-site interviews, the investigators probed these observed differences. Interviews were also held with representatives of the Ministry of Education's Independent Learning Centre.

Interview comments by the principals supported and clarified the survey findings. Correspondence courses were utilized in each of the six schools visited. In the majority of instances (5/6) these were administered through the guidance office with varying degrees of formal structure and involvement with the students who were allowed to register for such studies. The principals' concerns about the effectiveness of this strategy arose early in the interview sessions. Correspondence courses were described by principals as: "not a good solution but necessary"; "a stop gap measure involving core courses taken by necessity when courses cannot be timetabled"; or "designed for the gifted students who are short a course". One principal spoke at length of an "ongoing battle" with the Independent Learning Centre regarding access. In this individual's view, the centre "accepted only excellent, top notch students", and were "more interested in their own success record than in providing an alternative" mode for learning.

At first glance, the three criteria listed in the memorandum to secondary school principals (Ontario, 1977) on the revised correspondence studies program for day-school students do not appear excessively stringent. These included:

(1) the student must be registered in Grades 11, 12, or 13 and have completed successfully a minimum of 10 credits (the 1985-86 calendar indicates 14 credits)
(2) the course requested must not be available to the student at the school
(3) the student must have written recommendation from the principal.

However, a provincial review report (Ontario, 1978-79:2 (5)) on correspondence education in secondary schools addressed "the thorny issue" of "the low rate of successfully completed courses" and, based on a survey of 115 principals, recommended a "more careful screening of candidates to discourage students who are not likely to succeed". A year later in the provincial review follow-up (1980b), the Correspondence Branch issued its response to the previous document in which the branch addressed the question, "What should be the professional obligation toward screening?" The response was:

> The counsellor is professionally bound to refuse to recommend those students who cannot satisfy the requirements of the screening process. Indiscriminate referrals ultimately weaken the value of the service and its capacity to meet the needs of the deserving participants. Current Branch thinking supports a dramatic increase in the number of students refused access by the school screening process. (Ontario, 1980b:6)

This document identified the principal or his designate as ultimately responsible for this screening, although the process could involve or be delegated to the guidance counsellor and/or classroom teachers. Thus, when the principal's concern about access was raised with a representative of the Independent Learning Centre, the response was that it was "the schools" who were concerned about "their success rate" and it was they who created the stringent admission standards. The procedures outlined for the current system appear quite circular in nature, and while principals and the ILC castigated each other, the students reported getting caught in the process.

Students viewed correspondence courses as an alternative avenue of learning. That was a somewhat different perception than those expressed by the majority of the principals. The Grade 12 students interviewed recognized that "it's really hard to get a correspondence course". They consistently identified the need "for good study habits and time management" to succeed in such studies. Students stated that such work was done "to get credits needed to graduate". In four of the six schools, students indicated that such studies were completed "at home" with limited or no formal "help from the school". About 30% of the students had been or were enrolled in a correspondence course.

Several students reported they had been counselled out of trying such studies, and indicated their awareness of the low completion rate, but stated that correspondence courses were sometimes the only way to get the required credits to graduate. A few of the students recounted how they dropped out "about halfway through" or "after 9 or 10 lessons". The following account was shared by one student who tried a correspondence course in French.

> I worked all day at school. Then I went home to do my homework and the correspondence course. I held a part-time job too to make some money. I found it really hard to work at night and on weekends when I knew my friends were out having fun. I had no one to help me at home. My teachers were too busy, and I didn't want to bother them. After about 9 or 10 lessons I just quit.

Students expressed concern about available resources for courses (e.g. texts not sent until after lesson 5 completed; different texts required from those used in school), and lack of school support other than monthly or bi-monthly monitoring by the head of the guidance department "just to keep on your back...just to keep you going". In one school, two of the interviewees had taken the computer managed Grade 11 electronics course offered by the Independent Learning Centre. These students identified the course structure and in-class work time as positive factors in helping them complete the course requirements.

From provincial statistics provided by the Independent Learning Centre (Seary, 1986), provincial completion rates by secondary subject area were computed for the 1983-85 fiscal years. These have been summarized in Table 5.1.

Completion rates ranged from 22% to 39%, with highest rates found in Contemporary Studies (Family Studies, Career Development and Life Planning, Man in Society, and Economics). Other subjects with comparatively high completion rates were Latin (36%), Business Education (34%), Mathematics (33%) and Geography (32%). The three lowest completion rates were found in Science (24%), English (23%) and Computer Studies (22%).

While statistics by subject area were not available for individual schools, total course enrolments and completions were generated by the centre

Table 5.1

Course Completion Rates by Subject Area for Province
(1983-1985 Fiscal Years)*

Subject Area	Percentage of Courses Completed
Contemporary Studies	39**
Latin	36
Business Education	34
French	33
Mathematics	33
Geography	32
History	30
Technological Studies	25
Art	24
Science	24
English	23
Computer Education	22
All Subjects	30

*Source: Student Status study for [Correspondence] Enrolments Dated 83/04/01 To 85/03/31, Ontario Ministry of Education.

**Family Studies, Career Development and Life Planning, Man in Society, and Economics.

Table 5.2

Completion Rates of Correspondence Courses
for Six Selected Schools Between 1980-1985

School	Number of Courses Enrolled	Number of Courses Completed	Percentage Completion
A	201	116	58%
B	179	58	33%
C	219	70	32%
D	364	91	25%
E	102	25	25%
F	73	14	19%

for the six schools involved in the on-site interview phase of the study (McKinnon, 1987a). Course completion rates by school have been summarized in Table 5.2 for these six small northern secondary schools.

The range of completion rates across the six schools varied from 19% to 58% with an average of 32%. Average provincial completion percentages for all correspondence courses in English were computed by dividing the total number of course completions by the total number of course enrolments for the fiscal years of 1984-85 and 1985-86. Respectively these were 27% (1199/3236) and 28% (1327/3476). Table 5.2 shows completion rates for three schools were above the provincial average. Two were slightly below and one was almost 10% lower.

From the interviews it became clear that school A had a very formal in-school structure with a small number of interested and dedicated educators who provided a formal support system for students registered in correspondence courses. Schools B and C had less formal support systems. In school B, a number of students were bussed to school, and during part of the noon hour teachers were available and class space was provided for students working in correspondence courses to seek assistance with such work. School C reported a number of students enrolled in the computer managed courses. In schools D, E, and F, students reported no school support systems other than administrative details of registration and limited monitoring being handled by the guidance office.

It seemed clear that a well structured school-based support system, which combined human resources with dedicated space and time, as well as appropriate learning materials, made a significant difference in the success rate of students registered in correspondence courses. However, the issue of human resource allocation was central to several principals' interview comments. One administrator observed that "some teachers are quite open to the approach [correspondence courses] but one [the principal] has to be careful to see how far to go in this direction. There are limitations on what one can reasonably expect regarding workload", and added that ongoing monitoring was "essential to success". He concluded that "a co-ordinator was needed". However, two other principals noted they were short staffed in terms of their full-time teaching complement, and one individual stated candidly, "Even if I had more staff, I'd assign them as classroom teachers, rather than monitoring correspondence courses." It should be noted that the same administrator reported that students taking correspondence courses in that school system had declined "to a handful — four or five". Related issues of time and space were also mentioned by the principals. While the literature on decline had projected additional space for more flexible teaching patterns, two principals whose enrolments had declined expressed concern about lack of space to add another regularly scheduled area of instruction such as correspondence course supervision. In one instance, the principal reported that the school had been divided into two separate Francophone and Anglophone systems, and this change had taken up any free instructional space for administrative and support services. In the second instance, the principal reported that the board of education had moved its offices into the school, and so taken up any free instructional space. Both these principals expressed concern about allocating limited space for correspondence course supervision.

Teachers' interview comments revealed that few were formally involved with students involved in correspondence courses. Some comments reflected instances where students had sought out a teacher for help to understand an assignment or to locate text material referred to for the assignment. One teacher discussed at some length her informal involvement with students in such courses, and noted that this work was done on weekends or after school, and generally at the individual's own home. In this educator's opinion the correspondence courses were "badly out of date" and did not "prepare today's students for university". Instances were described of students who had completed such studies and then embarked upon what proved to be unsuccessful first years of university since they did not have the prerequisite skills and background knowledge. "They had to do it again." Another concern raised by this teacher was the observation that with help a student may do well on assignments, but "perform miserably on final examinations", which were perceived to be "a lot different from the assignments".

While teachers generally expressed a willingness to help a student with correspondence study if the student requested such assistance, one teacher summed up the sentiment of several others when he stated that such extra work was "a headache for most teachers," and depended on "one's generosity and professionalism". This teacher suggested more school structure was needed. In a similar vein, a vice-principal suggested that correspondence courses should "be treated just as seriously as in-school courses: timetabled, assigned a classroom, and supervised for attendance, and work completion". Another teacher indicated that since the school had "assigned a co-ordinator [for correspondence courses], our drop-out rate reduced to maybe 1 out of 5. Previous to that we had a completion rate of 3 out of 150."

The length of the courses in terms of the number of lessons to be completed and the lag time in feedback from previous work were identified as concerns by students. As well, limited access to required texts for assignments was a concern. Students who reported dropping out of a correspondence course generally indicated they did so about halfway through. This seemed to suggest that half course credits might be more manageable. When this possibility was explored with a representative of the Independent Learning Centre, he indicated experimental courses in such a format were being tried. Early completion rate statistics have indicated a significant improvement for students registered in half courses when compared with those enrolled in full courses. The Centre's representative reported that further study and experimentation was being carried out in the area (McKinnon, 1987a).

From the comments generated by the interviews, some clarification for the varied perceptions indicated by the survey questionnaire data has been provided. Correspondence courses were viewed predominantly by all three groups of respondents as last resort or stop gap alternatives. Correspondence education was not viewed as an alternative to broaden the program offerings available in the small secondary schools included in this study. Critical to success were adequate local support systems, which involved dedicated space, time, human resources, and learning materials. Although interviews with officials from the regional ministry office indicated that any student working with the Independent Learning Centre is to have direct linkage with a teacher, the field data from principals, teachers, and students clearly indicated this was not the case. Concerns about teaching load were reflected in the comments of all interviewees. While it was recognized by ministry officials that correspondence education "cannot be based on volunteerism and good will", they also recognized that "as yet we have not broken through" the complexity of issues that surrounded such studies. The potential of correspondence education appears yet to be tapped, and combined with technologically enhanced delivery it would appear to show potential worth examining for the small northern secondary schools.

5.4.1.1. Beyond Correspondence Courses

One school board made a very determined effort to move beyond the available correspondence courses in providing an alternate means to deliver courses to small numbers of students. The board wanted to have a course prepared in such a way that a teacher who was not a specialist in the subject could guide the self study of a few students. By delivering courses in this way, the school would not have to have a specialist teacher or many students in the subject. It would provide space, scheduled course time, a teacher-facilitator, and the prepared learning materials and equipment for the course; it would be much more than a correspondence course. The first attempt to do this built on an existing correspondence course. Various technologies such as computers for teaching and managing the course, Telidon, and satellite transmission were used. Several agencies outside the school board provided much money and expertise to support the effort. Another course was developed specifically for this delivery method. Largely supported by the Independent Learning Centre of the Ministry of Education, this electronics course showed very positive effects from the earlier experiences. The course materials formed a package that could be transported to different schools, and included electronic supplies and equipment, computer-based course and student management programs, and instructional packages. Later the course was distributed to other schools by the Independent Learning Centre.

For various reasons this alternate delivery system did not have the continuing positive effect on program delivery that was anticipated by the early advocates. Despite that, the fact that such an innovative and forward looking strategy would be initiated in a small, remote school system is a credit to those board officials, staff, and students who worked very hard to try to find another method of delivering a wider variety of quality programs to small numbers of students. It pointed in a direction that others should explore.

Bates (1982) evaluated this alternate delivery system project for the board. He identified some of the problems that this and probably other self study based program delivery strategies can have. It was apparent that an enormous amount of time, energy, and resources are required to produce a self study program. Technology has a place in the delivery of such programs but considerable care needs to be taken to ensure that the right technology is used in the right way. Some of the technology available, such as Telidon and computers, can be used quite inappropriately. Teachers who will be expected to work in different teaching situations, such as in the learning facilitator roles in this project, have to be prepared conceptually and methodologically for their roles. Students, who will learn in situations different than they are used to, have also to be trained for their new roles. The students in this project needed more help in how to learn from a textbook on their own and how to make useful notes. They also needed help in managing their time.

This alternate delivery system project showed that there is a price to pay and risks to take in being innovative. It also was a significant step in showing the way to a program delivery strategy that could enable small schools to offer a wider variety of courses to smaller numbers of students than the typical one teacher-one class pattern in a way that is potentially much more interesting and effective than the usual correspondence courses.

5.4.2. Co-operative Education

The Ontario Ministry of Education (Ontario, 1984:25) has subtitled the section of OSIS on Co-operative Education as "co-operative utilization of community resources". As such, these courses draw on business and industry systems in the local community so that

> a co-operative education course consists of an in-school component and an out-of-school component so that learning and experience are combined in an educationally beneficial way. (...) As in the care of other courses offered for credit, any course utilizing a co-operative mode of delivery shall be based on a curriculum guideline, and its out-of-school learning should be closely related to the in-school component.

Such learning alternatives fall within Bussard and Green's (1981) outside school systems coping strategies. Principals, teachers, and students were invited to share their experiences and perceptions of such courses as part of the on-site interviews, since co-operative education was not one of the common coping strategies identified by the three groups of respondents to the survey questionnaire.

The six schools visited had been involved in offering co-operative education in varying degrees. Three of the principals indicated they planned to hire a part-time co-ordinator for their school's programs. Principals' perceptions varied from "co-op ed. is a saviour with the new OSIS requirements" to more guarded comments such as "we dabbled with it last term, but the biggest hang-up was co-ordinating the in-school course timetabling with the workplace timetables." All agreed that co-operative education placements in a small community were sometimes difficult to find. Those administrators also noted that a good measure of success in such programs depended on good public relations, which required the skill and attention of a special teacher-administrator.

Benefits of co-operative education courses identified by the principals included: (1) the opportunity for students to experience the real world of work; (2) the opportunity for students to see the practical application of their school learning; and (3) the improved attitude of students toward school and learning. As one principal observed, "for a student to learn about drafting under the tutelage of a draftsman who knows and does drafting for his livelihood gives real motivation for a student. It's beautiful to see." Most of the principals reported positive experiences with co-operative education ventures. However, two principals noted some concerns about the political and economic sensitivities of the local community. In one community where there were few employers and many unemployed there was the suggestion that such student placements were seen as "taking work from someone who needed it". Another school administrator whose community was experiencing economic upheaval echoed similar concerns and noted that

> labour problems limited the access of students into placements in the workforce. Industry finds it difficult to accept student placements when union members question whether jobs are being taken from them.

Other principals expressed concern about the lack of meaningful placements in communities that were limited in size and more remote in location. There was a sense of having to protect the program from the less able and less committed students. To quote one principal, "One bad placement can sour it for a lot of people. In a small community everybody's business is everybody's business." He went on to explain how one negative experience spreads informally through the business community over coffee and informal talk at club meetings so that others are less likely to take a co-op ed. student placement. The issue of how many educational programs a small community can support was also raised. In one community, the local high school had developed over the previous decade an alternative work program for secondary students with 27 work stations. As well, the school had developed a very successful "work week" program,which was a short term once a year. The addition of co-operative education was seen to have a potentially negative impact on these already well established and valued programs.

Most of the teachers who were interviewed had not been involved directly in co-operative education ventures. Depending upon their teaching specialties, teachers saw varying opportunities for co-operative education courses in the local communities. Teachers from business studies and technical studies tended to be more positively inclined than those who taught English, history, or mathematics. Teachers tended to see such opportunities reserved for students in the senior division.

Conflicts in timetabling co-operative education placements and meeting the requirements for academic courses were cited as a concern by about half the teachers. One teacher who had been involved in co-operative education in a large urban school system indicated that "small communities have too little industry, too few businesses, too little variety" to successfully operate a co-operative education program. A cautionary note was also added regarding the overuse of a few potential employers: "Sending too many students to the same employers over and over can create lots of problems." Another teacher noted that such courses had previously been mounted for "basic level students", and expressed concern that widening such opportunities to general and advanced level students could limit opportunities for basic level students who needed such experiences. Teachers who had been involved noted that placements had to be made very carefully "to match the student and the employer" and that the communication lines had "to be kept open to avert problems". Teachers noted it was difficult to co-ordinate such assignments with regular classroom teaching responsibilities. Generally teachers spoke positively of the potential, but indicated the need for structure and co-ordination on a full-time basis. They expressed concerns about the limited pool of meaningful work placements in small communities.

The Grade 12 students interviewed generally had not experienced co-operative education courses as part of their secondary school programs. Students generally expressed interest and saw such courses providing opportunity to guide career decisions. One student who had worked as a teacher's aide indicated she did not want to be an elementary school teacher. Some students expressed concern about "keeping up with the school work" when out working in placements. They indicated it was hard to handle both. Coupled with the previous comment were concerns over transportation time and related problems. While students generally expressed positive opinions about the potential of such courses, several indicated they "didn't know enough about it yet".

For the small secondary schools visited, co-operative education was another coping strategy yet to be tapped. The targeted government funding was seen to provide needed support to explore the potential of this alternative. If the concerns expressed about the limited pool of relevant work placements in small communities, and the political and economic sensitivities prove to be what some principals project, co-operative education may have limited application as a coping strategy for small secondary schools in small, remote communities of Northern Ontario.

5.4.3. Regional Program Councils

Program councils had been recommended in the Allan Report (Allan, 1983:16) "to provide co-operative action as a response to changes made in the secondary school programs". At the time (1985) that the survey questionnaire phase of this study was carried out, program councils had been formed only in the northwestern region. With the exception of the responses from the principal and teachers from one secondary school from the midnorthern region, which had elected to become involved with one of these councils, respondents from the midnorthern and northeastern secondary schools reported no experience with the concept of regional program councils. Thus, this section reports primarily on the interview reactions of educators from northwestern Ontario. Included is information gathered from interviews with the two council co-ordinators and representatives of the ministry's northwestern Ontario regional office.

Although the idea of a regional program council had been discussed informally by educational leaders in northwestern Ontario prior to 1983, the first formal reference appeared in the recommendations by Allan (1983) in The Report of the Commission of Inquiry Regarding Small Secondary Schools in Northern Ontario. From interviews with the two program council co-ordinators, it was noted that Program Council West serving five school boards west of Thunder Bay (Atikokan, Dryden, Fort Frances-Rainy River, Kenora, and Red Lake) was launched in the fall of 1983 with Mr. Robert Fryer seconded as the council co-ordinator. Formal operation of the council began in August 1984. Program Council West served 10 high schools, six of which were classified as small secondary schools for extra-formula funding.

In March 1984, at the first Headmasters' Conference on Small Secondary Schools, the director of the northwestern Ontario regional office addressed the conference and reminded the participants that there was unfinished business from the Allan Report to which attention should be given, namely the organization of a program council east of Thunder Bay. This council was to serve three regional boards of education with small secondary schools (Geraldton, Lake Superior, and Nipigon-Red Rock). Two months later in May 1984, a proposal to establish a Program Council East was submitted by administrative representatives of the three boards to the regional director and, in the fall of 1984, Mr. Ivan Baak was seconded as that council's co-ordinator. The first formal meeting of the council was held in January 1985. This council served seven high schools from the northwestern region and one from the midnorthern region. All secondary schools were classified as small by the ministry's formula for extra funding.

The structure of the two councils, while similar in outline, differed in detail, reflecting the nature of the boards they serve. In each instance, the regional superintendent of curriculum had been identified as the Ministry of Education liaison person for the two councils. Each council was directed by an executive committee composed of the directors of education from the participating boards. The co-ordinator was to meet with this executive on a regular basis to provide direction and support for the councils, part of which was the setting of budget and the generating of funds from the participating boards to finance the operation of the activities of the council and work groups.

The councils vary in composition (number and educational roles). Program Council West is made up of seven educators representing a variety of school and system roles. In 1985-86 these included two system level curriculum co-ordinators from the two largest boards, a secondary principal, a vice-principal, department heads, and classroom teachers. Program Council East was composed of the principals from the eight high schools served, a representative from the executive committee, and the regional superintendent ex-officio, as well as the council co-ordinator. The councils were responsible, with the assistance of the co-ordinator, for the identification of regional program needs and the development of annual plans for the council's activities. They were to establish the identified task groups and facilitate the work of such groups, evaluate these curricular activities, and report annually to the executive committee, Ministry of Education regional office, and the local trustees.

The working or task groups were classroom educators drawn from the participating high schools and others with requisite expertise to accomplish specific directions set by the respective councils. Program Council East identified as its initial task the development of selected course documents for basic level students in English, mathematics, science, family studies, woodwork, and small engines. To these have been added work at the general or advanced levels in auto, computer studies, business studies, and visual arts. French speaking task groups were working on Français and mathématiques. Under the direction of Program Council West, task groups were identified to work on the development of course guides to facilitate the implementation of the new ministry curriculum guidelines being generated to facilitate the implementation of OSIS. Initially, task groups were identified for computer studies, guidance, and technical studies. To these have been added work groups in English, history, science, and visual arts. The documents produced represent courses for Grades 7 to OAC across all three levels (basic, general, and advanced).

As pointed out in section 5.3., the major funding to cover the salary of the seconded co-ordinator and travel costs related to this assignment came from the regional office of the Ministry of Education. Operating budgets for the council meetings and those of the work groups were covered with funds from the participating boards. Initially for Program Council West, these funds were generated on a per student basis. However, the larger boards questioned whether they were getting value for their dollar and if they really needed a program council since they had their own curriculum infrastructure. At the writing of this report these concerns appear to have been allayed and a set fee of $2,000 for small boards and $4,000 for each large board has been agreed upon. For Program Council East each participating board contributed to the operating budget on a shared cost formula determined by the full-time equivalent enrolment for each high school. The funding from the participating boards and the ministry's regional office was channelled through the school board from which the council co-ordinator had been seconded.

These program councils had been in operation from one to two years at the time of the questionnaire survey reported in Chapter 4. The survey data revealed very positive ratings for the councils' activities from those who had been directly involved in some aspect of the enterprise. However, those educators who had less direct or no involvement gave mixed ratings. During the on-site interviews, principals and teachers were invited to share their experiences and provide feedback to the investigators for the latter's interpretations of the survey findings on program councils. The following section provides a summary of these interview data.

Of the six principals interviewed, four had direct experience as members of one of the two program councils. All gave very positive comments about their personal experiences, and one indicated that "small secondary schools in the northwest couldn't cope with OSIS without council's help." All noted the positive impact of having their classroom teachers involved in the development of courses to be implemented in their classes. One indicated such "grass roots involvement of teachers was essential", and went on to identify as the council's "greatest strength" the involvement of the teacher in "the curriculum development, implementation, and evaluation". Council was described as providing "a department meeting" support system, which was "not available in small secondary schools with one or two person departments". Another noted that involvement in program council helped "the teachers to overcome the isolation they feel" in their teaching specializations. It was also noted that the councils provided a more formal channel for inter-school communication. Several of the principals expressed concern about the number of staff members being drawn out of the schools as the task groups increased. Not only the cost of supply teachers but also the difficulty in locating supply teachers were cited as problems in smaller communities. Principals who were not directly involved in either of the councils cautioned that curriculum development could become just "a reinvention of the wheel" if implementation was not systematically followed through. "Without implementation and evaluation curriculum development activities are only window dressing."

As with the principals, the teachers who were directly involved in the task groups spoke very positively of their experiences in terms of the opportunities provided for sharing ideas with others in the same area of specialization. One teacher said that in addition to developing curriculum, "there were opportunities to share materials, and ideas about teaching." "Teachers helping teachers is a good concept." Another spoke of sharing methods of evaluation and examination ideas. Several teachers said their principals' enthusiasm and support for council activities was a plus for improvement in their schools. Teachers who were not directly involved in program council activities gave more varied comments. One noted that "conning us into doing it ourselves is not necessarily going to change teachers' attitudes or practices." One department head who had the other members of the department working in a task group, stated that when council had been developed "it was a collation of units put together as a result of several people's work." Each part reflected the resources and approaches of the developer. When it came to implementation, the head noted that those parts of the course that received the most attention were the sections the teacher had prepared. "If you don't have the resources in your school for the unit, it poses a problem to implement it. The units for which materials are not readily available tend to be replaced by things the teacher has done before." Another teacher said "Committees are the bane of my life. Ideally we can get together to write, but to get the work done, one has to do it on one's own." Another observation was that "we all must reinvent the wheel separately if we really want ownership, and that's the big thing." Teachers in subjects not receiving attention from program councils indicated they had no experiences to share and said that council activities were not always well communicated. The comments underscore the value of involvement, and the problems of communicating effectively with those who are not directly involved.

In the interviews with the co-ordinators each was asked to identify those factors that had facilitated or impeded the work of the program councils. On the positive side, both identified strong support from the regional ministry office as well as support of the local directors of education and their boards for the council concept. This support was evidenced in the comments shared by the regional ministry officers in their interviews. The regional director shared his vision of extended human resources and support in the region for small secondary school programming, and his belief in program councils. He noted the fortuitous support and timing of the first Headmasters' Small Secondary Schools Conference and the release of the Allan Report, and indicated that the opportunity to chair the response committee to the report provided opportunities to provide leadership and bring to fruition that vision. He indicated a strong belief in program councils. "Since I knew what they could do,...I was willing to lose a few other [points] in exchange for that one." He indicated that other members on the response committee and even within his own regional office, who initially did not share his vision and understand the potential of program councils, were reticent to proceed. While the other northern regional offices opted for an increase in the number of education officers for the regional offices, he was able "to steer" and "push" the councils into existence in the northwestern region. The necessity of co-operation between and among the regional office, the participating boards, the program co-ordinators, and the teachers. All players had "to have a stake" in the enterprise. "Unless everyone is really committed, it will fall apart."

He noted that program councils were but one component in the region's curricular enterprise, and stressed that while "program councils link subject teachers," there is a critical need for the interface between these educators and the regional curriculum council "to see the whole big picture. Program councils cannot work in isolation." He observed that "isolation" was a "serious concern in the north," because it contributed to the lack of professional interaction that is taken for granted by teachers working in departments in large high schools. The program council was viewed as "a regional department providing linkages of quality" to support the classroom teachers in fulfilling their curricular responsibilities.

In a similar vein, another official from the regional office explained that the program councils were mentioned in the Allan Report "as miniature regional offices, independent from the Ministry of Education, set up in various parts of the region, membership to be appointed by the participating boards, and responsible for co-operative decisions regarding needed curricular activities". He also suggested that the members of the current councils needed to add a more clearly defined "implementor role to their developer/writer role, working as inservice facilitators in their own schools" and underscored the need for "professional development" for each council in curricular and instructional decision making. Both individuals stressed the need for formal focused program development activities. Both of the local board directors interviewed indicated their support of the program council venture.

Another major facilitator of the implementation of program councils in northwestern Ontario identified by both co-ordinators was the high degree of "quality support" for the council from "professional teachers". One co-ordinator expressed how his awareness of the varied expectations both within the school and in the larger community had been heightened as he worked with the teachers in the program council work groups. "The teacher in a small town is really expected to do an awful lot of things." He cited involvement in community political leadership, extracurricular sports that involve the community, leadership in local service organizations with their many projects, and local business enterprises as illustrative examples from the communities he visited. He added, "In a small school, you don't get those distinctions where you say 'this is the math teacher and this is the science teacher'; the guy that is the math teacher is quite often involved in science, too," and responsible for co-curricular activities "at noon and/or after school". The other co-ordinator also identified "great teacher support" as not only a major contributor but also an essential factor, if not the bedrock of the success of program councils.

While strong teacher support was cited as a major strength, the range of teacher knowledge of and experience in the curriculum decision making processes was noted as one of the challenges that sometimes slowed down the task group work. It was also stated that "varying levels of sophistication in terms of curriculum development and implementation extended to the board level as well". This was more noticeable where council was composed of big boards, small boards, and very small boards. There was some indication of "territorial concerns" and "issues of protocol" where program council activities had to be orchestrated in terms of large board curriculum infrastructures. In the other program council, the co-ordinator was concerned about administrators who had some reticence about involvement in a council project but would not raise such issues at council meetings so they could be dealt with; then "when they [the principals] go back to their schools these concerns are brought up" and undermine the program council's effectiveness. Another concern raised was the school administrator's level of commitment to the whole program council process, which extended beyond the council meetings. "Sometimes the things don't get carried back to the school, or at least the documents are not distributed." "I talk to the teachers, and they say they don't have the course materials, and I know we sent them out. They're sitting on a desk or a shelf somewhere." While both co-ordinators were reticent about labelling such factors as impediments, one was prepared to call such factors "burrs under the saddle", and the other referred to them as "real life concerns for a program council". Clearly the politics of curriculum decision making are realities in the operation of program councils. To date the dynamic mix of co-ordinator, director, principal, head, and teacher appeared to be working effectively.

One of the aspects of program councils that the regional director of education identified as critical to their success was their ability to change, not to extend tasks beyond their intended ends, and to alter players, if necessary, based on an ongoing evaluation of participant needs.

Program council co-ordinators were asked to comment on changes they had perceived in the operation of their respective councils and to share their projections about the future of the councils. Changes tended to vary from council to council. One change from the original proposals, which was common, was the continuation of the executive committees. Originally these were to dissolve once the council was in place. However, the involvement of the boards' directors was seen as essential for linkage to the participating boards in dealing with financial and administrative issues; since the councils served these boards the directors were seen as key educational leaders whose continuing input and support was considered essential. Both co-ordinators indicated that the original mandates had been extended to include additional constituencies. In one case, extension of the Roman Catholic system brought another small secondary school into the council; in another instance a small regional high school from an adjacent region sought involvement and membership in the council. With these additions the complexities of the council were increased in terms of protocols to be accommodated and local politics to be considered. Some of these additions added significant geographic distance for the co-ordinator to travel and the attendant increase in time commitment.

Another change involved the evolution of the composition of the work groups. In one council these groups were developed to include participants from all the relevant schools, with various schools being designated as meeting sites. The tasks were spread across all the schools. In the other council, board jurisdictions tended to take responsibility for the basic development of specific course documents, with work groups coming primarily from designated areas. A third modification was the changing of key players at the executive (i.e. board director) or council levels (school representatives). In one instance, the co-ordinator said that one school had had four different representatives in less than three years. While these changes brought new faces and fresh ideas to the meeting tables, the continuity of a task group was broken and "time had to be spent bringing people on board". In one of the councils, there had been a concerted effort to involve the education officers assigned to specific teaching subjects with the program council's activities, where appropriate. Such involvement, while supported by the regional superintendent of curriculum, had met with varying degrees of success since the education officers brought varying degrees of commitment and their own agendas to the council's projects. The funding formula changed from a per student capita assessment to a set budget allocation set by the executive for large and small boards.

Both co-ordinators saw the program councils continuing productively on their present agendas for four or five years into the future, but recognized their very existence was the result of political commissions and governmental decisions and that players beyond themselves would determine the future. Both maintained that "continued support from the ministry's regional office and the boards" was essential. As well, continued meaningful involvement of the teachers in curricular projects from the small secondary schools was seen as the focal responsibility. Changes in leadership at the regional, board, and school levels were seen as critical determinants of the future. It was generally perceived that recent legislation (Bill 30 [extension of separate school funding], Bill 75 [governance of minority language instructional]) had legitimized the small secondary school and that there would be a continuing need for program council activities. Areas in which a council could work more effectively included professional in-service training for principals and teachers in the curricular and instructional processes. Implementation of the products from the curriculum development project was seen to need continuing and more focused attention. Although neither co-ordinator identified the areas of correspondence education or technologically enhanced course delivery as directions of the future, both agreed that these were education issues that needed to be addressed in the small secondary schools of the north.

In individual discussions with the co-ordinators, it was generally agreed that there was strength for the councils in a single well-articulated focus. Multiple foci clearly added to the complexity of all facets and phases of their activities. However, there were times and situations where the single focus had to be modified to accommodate other interests. It was agreed that the composition of the council was a critical factor in determining the successful transfer of tasks to the school level. The presence of the school principals was seen as valuable in terms of gaining school level commitment to the program work. It was also thought that such commitment was not necessarily automatic and varied from project to project even when the council was formed entirely of school level administrators. Complexity in council activities was affected not only by the number of boards participating but also by the size and nature of those boards. Larger boards with their own curriculum decision making infrastructure were more likely to question the value of the council's work, and raise issues related to funding. Board size

Table 5.3

Program Councils in Northwestern Ontario:
A Structural Comparison

	Council	
	A	B
Structure		
Regional Ministry Liaison	Regional Superintendent of Curriculum	Regional Superintendent of Curriculum
Executive Committee		
size	3	6
composition	2 board directors of education 1 education officer responsible for administration of small board	3 board directors of education--large boards with small high schools in jurisdiction 3 board directors of education--small boards single high school
Council		
size	10	7
composition	8 secondary principals 1 member from executive 1 regional superintendent	board chosen representatives: 2 curriculum personnel 3 high school administrators 2 high school department heads
Work groups	drawn from teaching staff across the 8 participating schools	drawn from teaching staff and board curriculum personnel, generally within a board jurisdiction

and nature also contributed to a more varied and sophisticated set of abilities and a wider range of curriculum needs.

The on-site interview data helped to clarify the varied perceptions reflected in the survey questionnaire findings. Visits with the two co-ordinators added insight into the similarities and differences that existed not only in the structure but also the operation of these councils. Tables 5.3 and 5.4 provide summaries of the major points noted in this section.

Table 5.4

Program Councils in Northwestern Ontario:
An Operational Comparison

	Council	
	A	B
Number of schools served	8 gr. 9-12/OAC	11+ gr. 7-12/OAC programming
Initial Development Focus	basic level courses -single level -selected subjects	courses for new OSIS guidelines -multilevel grade -varied subjects by guideline
Number of Meetings		
Executive	monthly	2 per year
Council	3 per year	5-6 per year
Task groups	2 2-day working sessions per year	5-6 meetings
Funding		
operating budget	per capita assessment on student enrolments by school	2 tiered board assessment either large or small
co-ordinator's salary/ travel	ministry regional office	ministry regional office

5.5. The Irreducible Curriculum

As well as commenting on the within, between, and outside school system coping strategies, the principals, teachers, and students interviewed were invited to provide their perceptions of an "irreducible curriculum". These comments are discussed briefly in this section.

When asked to comment on the concept of an irreducible curriculum, principals' comments indicated that such thinking was not part of their conceptions of secondary education in an Ontario context. Most principals indicated that they thought not about the minimum offering required but rather as one principal said, "Our focus should be on how can we offer the best, broadest program possible." Expansion rather than reduction was generally their concern. When pressed to identify what was essential for any secondary program, some principals referred to OSIS and its "prescribed minimum academic core" as being irreducible. "We can't reduce further." Several of the principals said that in some instances substitutions were allowed, and thought that these must be maintained and even expanded if the small secondary school was to cope with meeting the OSIS requirements. Some concerns were expressed that the concept of an irreducible curriculum had a negative effect on technical and business studies as well as on family studies. Such studies were seen as being important for students who were seeking employment after high school.

Teachers expressed varied opinions about what should constitute a "core curriculum". Generally there was unanimous agreement for the inclusion of mathematics and English in all programs. Some questioned whether five courses in English should be required, and suggested that four might be sufficient. There was also considerable teacher support for the study of science. Once one moved beyond these three subject areas, the variation of perceptions increased. While technical studies teachers questioned the mandatory inclusion of history and geography in the program of studies for technical students, other teachers stressed their importance, particularly in terms of Canadian studies. Several teachers raised concern about the decline of the number of students in physical and health education classes and suggested such a course should be mandatory at the senior level. A number of teachers also expressed the need for required courses in computer literacy.

Among the comments from the students, there again was near unanimous agreement that courses in mathematics and English should be mandatory. A high degree of agreement was expressed for the inclusion of science. Beyond these subject areas a number of students suggested that programs should include courses in either or both technical and business studies. Some students questioned whether the courses they had taken in these areas were really designed to help in the workplace.

The concept of an irreducible curriculum as reflected in the interview comments of school administrators, classroom teachers, and students was not familiar or well defined. If one thought of a student's program being a series of concentric circles, with the centre being mandatory, it would be easy to identify English and mathematics at the centre, and probably science. As one moved out from that core there appeared to be increasing variation in the opinions of those interviewed both in terms of what should be included and for what grade levels such studies should be required.

5.6. Summary

In this chapter the findings from the analyses of the on-site interviews have been presented. These findings have extended the survey questionnaire findings and helped to clarify some of the points in the latter, which seemed on the surface to be at variance with each other. Principals and teachers expressed genuine concern about the programs offered by their schools, and the welfare of the students served. The category of coping strategies most widely used in these schools were within school system. As one principal noted, "They probably would not be considered innovative. They just work." There appeared to be limited use of between school system coping strategies, which in part underscores the geographic realities and by and large the isolation of many of these secondary schools. Outside school system coping strategies noted and described included correspondence/distance education and co-operative education. Both of these alternatives appeared to have untapped potential in terms of their utilization. The operation of two program councils has been described in some detail. Such ventures appeared to have been very successful and possess potential for further development. Finally, the on-site interviews generally indicated that principals, teachers, and students thought not of curriculum reduction but rather of curriculum expansion. When pressed on the concept of "an irreducible curriculum", general agreement was found only for the inclusion of English, mathematics, and science. Beyond these subject areas, there were quite varied opinions on what should be included, at what levels, or across which divisions.

Chapter 6

Program Delivery in Small Northern Secondary Schools: Implications and Alternatives

6.1. Introduction

Tye (1985) entitled her study of 13 American high schools, Multiple Realities. The present study has underscored these multiple realities not only between and among the secondary schools studied in terms of their local community contexts, but also within the schools in terms of the perceptions of the principals, teachers, and students who make these institutions schools. Based on the data generated from the inter-provincial visits, the survey questionnaires on program delivery, and the on-site interviews with purposively selected respondents, findings have been reported in the preceding chapters. In this final chapter, we turn the reader's attention again to the mandate of this study and attempt to provide an integrative summary of the changes in program delivery in small secondary schools in Northern Ontario in an attempt to determine the impact of decline across the decade from 1975 to 1984. Commentary will be presented on the common coping strategies used in program delivery during the period of provincial enrolment decline and the perceived effectiveness of these strategies not only from the perspectives of the principals but also from the teachers and Grade 12 students. As is clear in the literature, and reaffirmed in this study, decline does not occur in a vacuum. Factors other than decline, which occurred concurrently and which were perceived to have had an influence on program delivery, also will be briefly discussed in terms of their perceived impact. In the concluding section of this chapter, implications arising from the findings of this study are considered and alternative action plans proposed.

6.2. Changes in Program Delivery Between 1975-1984

As the heading to this section indicates, the focus of this study has been the delivery of program. In 1975 the most prevalent mode of delivery was the traditional one teacher-one class. As enrolments declined this has continued as the common means of delivering secondary education. From the comments of principals, teachers, and students, such instruction is still preferred by all three groups. Alternative delivery modes generally were perceived as less effective. There is a sense that this somewhat traditional encapsulated viewpoint may in fact mitigate experimentation with alternative modes of delivery. Principals' comments made reference to the constraints of what teachers were able and willing to do. Teachers identified the principal's attitude toward trying alternatives as a significant factor in determining successful experimentation. Thus, changes in program delivery appear to have been more in degree rather than kind.

6.2.1. Changes of Degree

For example, the three major coping strategies identified by all three groups of respondents included (1) use of correspondence courses, (2) alternate year course delivery and (3) multicourse/-level classes. All three were used to some degree in 1975. In 1984 all three were used more widely and more often. In the instance of correspondence education, its use in the twenty-two schools sampled in this study rose from 1,341 course enrolments over the period from 1974-1979, to 2,449 course enrolments for the period from 1980-1985. These statistics, supplied by the Independent Learning Centre (Seary, 1976), represented a 45% increase in this mode of delivery. Findings from the on-site interviews coupled with data from the Independent Learning Centre indicated that student completion rates were significantly enhanced when dedicated personnel, time, and space were allocated to provide continuing support for students enrolled in such studies. However, correspondence education was perceived by the majority of principals, teachers, and students as studies outside the school. Allocation of more than limited human resources from the teaching staff appears unlikely. Thus, if students are to have not only access to but also support from the school system for such studies, it would appear that targeted funding for at least part-time staff to co-ordinate and supervise such studies will be essential. The co-operative education model may also be applicable to correspondence education. Further, the drop-out point in correspondence courses seems to come about half way through the course. Coupled with the improved completion rates for half course credits reported by the Independent Learning Centre, it seems that such an alternative should be extended to more day school students in a broader range of courses. Correspondence education although commonly reported seems to be a coping strategy that could be much more effectively utilized. The two suggestions above seem to have potential for such improvement.

Likewise mixed classes, both levels and subjects, have increased in number. Classes with mixed grades during the early part of the decade under study were classed as open level electives. While such are no longer approved by the ministry regulations, modified multigrade classes have been created by alternate year course offerings. Teachers and principals reported that while co-educational physical and health education classes were less common experiences in 1975, these have increased in number in the senior division in some schools. Such multicourses tend to be handled in a traditional whole class instructional mode.

6.2.2. Changes of Kind

Changes of kind included the utilization of computers and co-operative education. The use of the computer in classroom instruction has been a relatively recent phenomenon enhanced by access to and assistance for less expensive hardware. However, the findings of this study indicated that this use was primarily in computer literacy classes or data processing business education classes in which students were learning how to use the computer rather than an alternative mode for delivering instruction. The computer assisted delivery of the Grade 11 course in electronics from the Independent Learning Centre was one of the few examples of such instructional delivery. Spokesmen for the centre indicated this was a developing and growing area of delivery for their unit. A Grade 12 digital electronics course was being field tested, and a number of courses in computer studies and accounting were reported to be in various stages of development. Little attention appeared to have been given to the development of software for computer assisted instruction that reflects the ministry approved guidelines in subject areas outside of computers such as science, geography, or mathematics.

The use of co-operative education also seemed to be a relatively recent course delivery mode. It was reported by only 23% of the principals and identified as an alternative by only 14% of the students. At the time of the on-site interviews, such course delivery was still in the planning stages or on an experimental basis in most of the small northern secondary schools. In light of the concerns raised by both principals and teachers regarding the limited pool of relevant placements in smaller remote resource-based communities, coupled with overutilization of such limited positions, it would appear that this mode of delivery, while currently fostered by targeted government funding, may prove a greater boon to the big school in the larger urban centre where the placement pool is both larger and more varied. The implementation of such program delivery needs to be carefully monitored for the small secondary school and recommendations for improvement sought from educators in northern small secondary school settings.

6.2.3. Coping Strategies in Use

The findings of this study collectively confirm that the most prevalent type of coping alternatives were Bussard and Green's (1981) within system strategies and these were primarily school based in nature. The next most commonly used group of alternatives were the outside of system category. As noted previously, both correspondence and co-operative education fall into this group. The use of program councils as recommended in the Allan Report (Allan, 1983) seems to have been successful, although survey and interview data varied in terms of positive or negative perception depending on the degree and nature of involvement of the respondents. When key system and school level leaders were directly involved in the enterprise, the ratings were generally more positive. To date the major emphasis appeared to be on the development of curriculum documents. Comments from teachers, in particular, seemed to suggest a need for more emphasis on classroom implementation back in the school. The area of classroom instruction for multilevel courses seemed to be an area of implementation in which the councils could co-ordinate specific in-service training for the teachers. The program council enterprise has reallocated some of the human resources from the ministry's regional office into the region and provided a forum for regional educators to provide input into how those resources will be focused and utilized. The councils are valuable facilitation organizations for the curriculum responsibilities of the local boards with small secondary schools and provide a surrogate "department meeting" for teachers from one or two person departments. They merit continued support from both the regional office and the participating boards of education.

Between system coping strategies were reported infrequently or not at all. These alternatives appeared to be underutilized. It would seem appropriate for regional groups, such as the regional education councils, and/or the regional curriculum councils to examine such alternatives as regional, or sub-regional professional development opportunities, which could facilitate inter-school sharing if not on a formal level at least informally. Teachers in particular expressed the need for such opportunities.

In the interviews with the teachers on multicourse classes, it became very clear that the secondary educators in these small northern secondary schools perceived that they had received little or no preparation for coping with the more heterogeneous classes currently created by multilevel, multigrade, or multisubject instructional situations. Further, their comments indicated that formal and informal professional development did not address these needs. There is a need for faculties of education, the teachers' federations, and those responsible for local and regional in-service training to address such needs. Multicourse classes are a reality in small secondary schools. Principals, teachers, and students seem to need assistance to make such learning contexts more effective.

As noted previously, technologically enhanced course delivery was relatively limited at this time. It is an area with much promised potential for the future. In part the limited use is due to the lack of approved course software that meets ministry diploma requirements. The Independent Learning Centre indicated they were addressing this area more aggressively since targeted government funding has been made available. However, as indicated in the immediate goals of the centre, the focus seemed to be on computer literacy and computer application courses rather than on computer assisted instruction. Both need to be addressed.

In some of the northern communities visited, access systems also presented problems. For example, one of the high schools included in the on-site visits reported not having access to TVOntario and had experienced considerable delays and technical difficulties in accessing resources at a regional community college through the provincial telephone system. While the distance education network for Northern Ontario through the government funded Contact North project promises to provide a valuable infrastructure to facilitate the technologically enhanced delivery of distance education courses, it must be recognized that the current project will not provide universal access for small secondary schools. Using the northwestern region as a case in point, the network currently consists of a co-ordinating centre in Thunder Bay and nine regional access points. There are five additional sites to be negotiated for implementation in 1988-89. Of the ten small secondary schools from northwestern Ontario included in the study, only five are in communities that have been selected as regional access centres. Of these five communities, only three are located in the secondary school. The majority of the access points are in other community locations. Considering the varied communities and constituencies within those communities who are seeking access to college or university level studies, it is highly unlikely the remaining five centres planned for 1988-89 will be in the five communities that have the small secondary schools. Thus, access to Contact North will be limited to those communities identified as regional nodes in the network and within those communities there will be varying degrees of accessibility for secondary day school course delivery. Such issues need addressing.

In addition to access, there are other issues that will need to be addressed. Included in principals' interview comments were compatibility of existing hardware with new facilities and available technical and human support for learners to use the technology. Related to this will be the degree to which the equipment and programs were user friendly, and yet to be established were such factors as effectiveness and delivery and maintenance costs. The promise is there, but will be fulfilled to the degree that the ventures are supported internally as well as externally. The implementation of outside system strategies seemed to depend on within system accommodation and provision of adequate support to ensure success. Program councils may be able to help principals, classroom teachers, and students orient themselves for such learning and provide the within system support structure for technologically enhanced program delivery.

6.2.4. Program Decision Making During Decline

The data generated by the survey and the on-site interviews suggested small secondary school administrators chose strategies that worked sufficiently well to get by with as little disruption to the system as possible. The existing self-contained classroom with one class-one teacher as the base has experienced relatively limited change. To the degree that declining enrolments and changes demanded multiple levels, such were implemented. The number of alternatives to that traditional high school model have been found to be few in number. No school was found to employ more than half a dozen of the alternatives described in the literature review. Of these there were only three commonly reported. The consequences of the changes made were generally minimal. Problems appear to have been approached in a piecemeal fashion across the decade. Schools did not appear to have long-range program delivery plans in operation. If any plan dominated the decision making it was the ministry regulations for diploma requirements. Actions tended to remediate or alleviate the concerns generated by declining enrolments without any major attempts to change the program delivery system as it was relatively independent of student numbers. Changes were undertaken most often in response to outside pressure such as OSIS (Ontario, 1984), or targeted funding for co-operative education. Such a pattern of decision making has been described by Mann (1975) as "disjointed incrementalism". Regarding such a strategy, he observed, "The idea of incrementalism...refers to the fact that most changes are relatively small and affect only the edges or margins of existing activities." He went on to say that the "disjointed" feature called "attention to the many disparate, and relatively unco-ordinated influences and phases...through which most policy decisions" are reached (1975:158).

Mann's description from the mid-seventies seems a fairly accurate description of most of the school administrations in this study. Such a strategy clearly allowed for the complexities of the curriculum decision-making process and accommodated the dynamic nature of student interests and shifting enrolments as well as the sometimes unstable economic and political realities of the small resource-based communities served by these secondary schools. To a significant degree the approach appeared to have been a success. Most students reported the programs were of value in terms of both their vocational (76%) and academic (85%) plans. There was variation across programs. However, the greatest degree of dissatisfaction vocationally (42%) was reported by the smallest group of students by program (Arts: 2% of student population). No major areas of unrest were identified by the teachers. This also would suggest that the incremental approach was working for these principals. However, the literature suggests that the most effective way to cope with decline is through systematic long range planning.

6.3. Change and Constraints

While the focus of the present study was to document changes in program delivery during a period of provincial enrolment decline, such change proved minimal in most of the small northern secondary schools in this study. Principals and teachers were asked to identify factors other than or in addition to declining enrolments that had fostered or impeded program change. The major factor identified by both groups was the ministry's 1984 publication of OSIS (Ontario, 1984). The increased number of required courses was perceived generally to reduce the number of students available in the pool to take courses other than those required. Teachers identified business education, family studies, geography, history, and technical studies as areas which OSIS had negatively affected. Analyses of student enrolments by subject as documented in the September reports supported notable decline in the senior division in geography, history, and business studies. The severest decline was noted in family studies, which had virtually disappeared from the senior programs in a number of small secondary schools. Technical studies dropped from an area of heavy enrolment to one of moderate enrolment in the senior division. However, findings indicated that technical studies in the intermediate division had remained fairly stable with perhaps a slight indication of growth in the four schools examined.

The other factor that principals noted as a constraining factor on program modification was the ability of the teaching staff to change. Interview comments by principals underscored how teachers' inability or unwillingness to change diminished the implementation success of alternative program delivery strategies. Teachers, however, did not perceive such to be the case. Teacher survey data weighted staff attitude as a positive factor. Interview comments from teachers often identified the principal's enthusiasm for change as a determining factor in setting the pace for program modifications and attributed a negative impact to planning errors or lack of planning on the part of administration. Thus, some degree of encapsulation appeared to have been operating as both principals and teachers described program delivery constraints from their personal perspectives. There seemed to be a need to develop alternative co-operative frameworks for principals, teachers, and students to view program delivery.

6.4. Recommendations

It has been suggested that the model most descriptive of the coping strategies employed in most of the small school in this study was disjointed incrementalism. Schools may continue to operate in this manner or they may take a more aggressive long-range approach to implementing alternative program delivery strategies for coping with small enrolment numbers. Informed planning is an important part of such an approach. In this concluding section, recommendations made in the earlier sections of this chapter have been summarized under the three categories from Bussard and Green (1981).

6.4.1. Within System Coping Strategies

While within system coping strategies were identified as the major group of alternatives employed in the schools in this study, these were not always as effectively employed as they might be. To improve the implementation of such strategies the following recommendations are made.

The major program delivery resource in any school, but particularly in the small secondary school, is the teaching staff. Survey findings and interview comments from principals, teachers, and students underscored the need for educators not only with subject specialization but also with a general broader knowledge base about other subjects, learning, and teaching. A repertoire of alternative teaching strategies appropriate for more heterogeneous classrooms would improve teaching in areas outside of a teacher's area of specialization.

Two other strategies from this category identified by all participants were multilevel/-grade/-subject classes and alternate year delivery.

During the interview sessions, teachers expressed a need for assistance in developing alternative instructional strategies appropriate for multicourse classes.

Recommendation 1

> That (a) individuals preparing to teach in small secondary schools be prepared and certificated in three teachable subject areas; and (b) that selected teacher education institutions include in their preservice teacher education programs/courses/modules that focus on teaching in small secondary schools (e.g. diagnostic teaching techniques, pretesting, grouping for instruction, increasing instructional time on task, providing clear instructions that facilitate independent study, providing appropriate evaluative feedback).

Recommendation 2

> That boards, federations, regional offices of the Ministry of Education, and teacher education institutions discuss and develop ways to address the needs of teachers in multilevel/-grade/-subject classrooms for in-service teacher education. The production of a series of professional development videotapes in this area would seem to be of value for school based in-service training.

Principals, teachers, and students expressed concern about alternative year delivery and the problem of students getting caught without access to required courses for graduation.

Recommendation 3

> That small high schools using alternative year delivery develop rolling four year plans for such courses; that these plans be provided to each student in writing at the commencement of each year; that timetabling of regularly offered courses be carefully developed to avoid conflict with alternate year courses.

The use of independent or self study modules or courses were reported infrequently. This seems to be a potential alternative that could be of value to small high schools with declining numbers.

Recommendation 4

> That the regional offices and boards of education explore ways, perhaps through program councils, to assist teachers with the

development and implementation of such independent/self study instructional alternatives.

6.4.2. Between System Strategies

The data generated from the survey and interviews indicated infrequent use of between system strategies. This appeared to be a source of valuable alternatives in need of careful consideration.

Recommendation 5

That the regional offices encourage through such organizations as the regional education council and/or the regional curriculum councils the examination the potential for such inter-board sharing.

Recommendation 6

That such groups develop ways to support classroom teachers in small secondary schools through an annual event such as regional Professional Development days in which the focus is on issues of teaching in small secondary schools.

6.4.3. Outside System Strategies

Commonly reported strategies from this category included correspondence education, co-operative education, and consortia such as regional program councils. In the instance of correspondence education:

Recommendation 7

That the Independent Learning Centre continue and expand the development of the half course delivery mode for secondary day school students.

Recommendation 8

That the model used with the computer assisted learning courses in electronics be extended to course development in geography, science, and mathematics in addition to the planned computer literacy and application courses.

Recommendation 9

That targeted funding be made available, similar to co-operative education, for the employment of certificated personnel to co-ordinate and supervise correspondence education courses with dedicated time and space as part of the school's timetable.

Recommendation 10

That in-service training packages be prepared by the Independent Learning Centre in co-operation with boards, federations, and teacher education institutions on the successful implementation of correspondence education in secondary school settings with maturing students who cannot be assumed to function like adult learners.

Recommendation 11

That, as technologically enhanced course delivery alternatives are developed and ministry approved course software become available, appropriate in-service training be made available for both the students and the teachers who will use such in small secondary schools. These could be developed in co-operation between faculties of education and the Independent Learning Centre.

The complexities and dynamic nature of the multiple realities that we collectively label the small northern secondary school does not appear to be represented in the current "big board" structure of the Ministry of Education. In Ontario, small secondary schools still too often are seen as problems, which is quite different from Saskatchewan and Manitoba where small secondary schools are recognized as an integral part of the educational system and as essential contributors to the viability of small remote rural or semi-rural communities. In Manitoba the provincial Department of Education has demonstrated its recognition of small schools by the creation of a Regional Services Branch.

Recommendation 12

That the ministry create a central office unit charged with the responsibility of co-ordinating those issues that are associated with small secondary schools and providing input from the educators in the field to the Minister through two or three regional suboffices.

Recommendation 13

> That targeted funding continue to be made available for specific use in small secondary schools, and that the ministry seek input from the small secondary schools and their boards to determine the foci of a rolling three year plan for such funding.

The data from both the survey and interviews have provided consistent documentation for the general success of regional program councils. However, to date the focus has been primarily on curriculum development. There was a perceived need for more structured attention to implementation at the classroom level. Thus,

Recommendation 14

> That the ministry and board support for regional program councils be continued.

Recommendation 15

> That the existing program councils reconsider their mandates and develop rolling 3 to 5 year plans that reflect a greater emphasis on implementation at the classroom level in small secondary schools. As an example, attention needs to be given to the implementation of technologically enhanced course delivery.

Recommendation 16

> That the co-ordinators of program councils become active participants on those regional advisory bodies for Contact North (the Northern Ontario distance education network).

While each of the foregoing recommendations has been offered in the belief that collectively they will contribute to more effective and efficient small secondary schools in Northern Ontario, it is recognized that documentation of such effectiveness and efficiency is required. To do so, a sound research base is needed. To date the literature has been dominated by studies of a general descriptive nature. Research on the small secondary school is also needed more specifically on areas of alternative teaching strategies, in specific subject areas.

Recommendation 17

> That the ministry, boards, federations, and teacher education institutions be encouraged to develop research agendas in co-operation with principals, teachers, and students of the small secondary schools, which focus specifically on issues relevant to small secondary school education.

Recommendation 18

> That in both the intermediate and senior divisions there be systematic study of multilevel/-grade/-subject classes in terms of the subject discipline structures and the learning abilities and needs of students.

Recommendation 19

> That the use of correspondence education and technologically enhanced course delivery at the secondary school level be systematically examined.

Considering both fertility and migration factors in demographic projections for the province, the Ontario Ministry of Treasury and Economics (Ontario, 1985) has forecast a continued decline in the population numbers for the age cohort 15 to 19 years until at least 1996. While a modest increase in this age cohort is projected between 1996 and the year 2001, even the most positive predictions do not see this increase reaching the 1986 numbers. Such demographics coupled with policy decisions that encourage the extension of full secondary education for the province's separate school system and Ontario's Francophone communities seem to ensure the continuation, even increase, of small secondary schools across the province. Certainly small secondary schools have been and will continue to be a reality in Northern Ontario. This reality as documented in the literature and this research study is at one and the same time complex and dynamic. Such schools are integral components of the small communities of which they are a part and are essential to the viability and longevity of their host communities. They have served the greater majority of our secondary students well. They could be improved, but for this to take place they need systematic and continued support. This research report may prove helpful in developing a base for such support.

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